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ABSTRACT

An extensive final report of the proceedings of an international seminar on distance education in developing nations of Africa includes presented papers, discussion proceedings, and views of several participants. Contents include the following: notes on the origin of the United Nations Economic Commission for Africa's initiative in distance education; notes and texts from the plenary sessions, including papers on planning for distance education, such systems in other developing nations inside and outside Africa, sharing of materials, and vocational training; committee reports on analysis of experiences and international cooperation, staff training and development; the role of the university, and exchange of materials; a general report; resolutions of the seminar; closing speeches; and notes on seminar evaluation, conclusions, and the current situation for funding from outside sources. (MSE)

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INTERNATIONAL SEMINAR
13. - 15. SEPTEMBER 1979
IN ADDIS ABABA/ETHIOPIA

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1. INTRODUCTION

Conventional educational systems in developing countries have proved inadequate in coping with their manpower training demands for economic and social development. New and less expensive ways of training have to be developed to cope with the training needs. Therefore educational planners are convinced that distance education (correspondence courses and related mass media techniques) will be a solution for the many problems education and training of the peoples in the Third World are facing.

Under its Training for Development Programme, the United Nations Economic Commission for Africa (Addis Ababa) has been concerned with promoting the most effective methods for facilitating mass skill development even for remote areas that have no access to instructional centres. ECA attaches great importance to the role that distance education can play in the development in spreading knowledge and skills as well as in raising the general level of education of the mass of the population; this is essential in any attack on the age-old problem of poverty, disease and ignorance in most of the communities in developing countries.

In this connection ECA has developed in the past few years a Distance Education Programme for the African Continent, comprising of action plans for the 51 Member States. Within the scope of its work programme for 1979/1980 ECA will be engaged in implementing the plans of the Distance Education Programme.

In this phase of development of the programme it was found an urgent need to organize an International Seminar for experts, practitioners and researchers in the field of distance education, and for observers from international organisations and representatives of agencies of the United Nations system whose activities fall within the purview of the seminar. The seminar has been held from 3. to 15. September 1979 in ECA Headquarters, Africa Hall, Addis Ababa. Many experts from Africa, Asia and Europe participated in the deliberations together with observers and representatives of organizations.

The seminar has been made possible by financial assistance from the German Foundation for International Development (Bonn) and the Government of The Netherlands. The seminar has been a joint venture of ECA with this organisation and co-operating with the African Association for Correspondence Education.

In the Aide-Memoire for the International Seminar on Distance Education the following objectives were listed:

1. To review the role and impact of Distance Education in the development and acquisition of skills on all levels for the developing countries. In this context a comparative analysis will be made on the following topics:

   (i) Cases of various strategies and methodology used in various countries in Africa and Asia;

   (ii) Cases of target-groups for which the methodology and strategies were most successful;

   (iii) Cases of effective ways in which correspondence courses and the related mass-media techniques were successful;

   (iv) The role of universities in Distance Education.

2. To develop strategies for international co-operation in the field of distance education.

   (i) Inter-African and Inter-Asian lines of communication;

   (ii) Decisions on strategy for international linkages between

African institutions/universities and overseas institutions in the industrialized world;

(iii) A strategy of making the most effective and efficient use of donor organisations and of private consultancy firms.

3. To determine the relations between distance education and non-formal education.

4. To determine and identify strategies and procedures for the evaluation of Distance Education Training Programme and Methods.

5. To design short-term and long-term action oriented programmes and strategies for the development and promotion of Distance Education Systems.

6. To design programmes for the training of personnel on all levels for distance education institutions.

7. To enlist priorities in the development of distance education methods, media and related courses in relation with the manpower needs in Africa and Asia. It has to be decided upon in how far it will be possible to:

   (i) Translate and adapt courses from other countries within Africa and Asia;

   (ii) Translate and adapt courses with a non-cultural basis from countries in the industrialized world for use in Africa and Asia.

8. In addition to the productive discussions, there is some time set aside for the general business meeting of the African Association for Correspondence Education (AACE).

The focal theme of the Seminar has been "Distance Education Methods and practices in Africa and Asia". The original plan was to discuss the following focussing topics:

(i) Comparative analysis of experiences in Distance Education in Africa, Asia and Europe and the development of strategies for international co-operation in Distance Education;

(ii) Production of a Handbook for Distance Educators and the evaluation of a Correspondence Course for Correspondence Course Writers;

(iii) Training and Development of Distance Educators;

(iv) The role of universities in Distance Education.

A number of working groups were proposed each of which had to focus on the various operational modalities of the theme:

(a) Analysis of Experience and Co-operation: Major questions and problems to be discussed will focus on the participants' countries with special reference to administration, policy, staffing, funding, etc., of non-formal education, the role of commercial correspondence colleges, the development of distance education institutions and conventional institutions.

ECA's Distance Education Programme focussing on international linkages, establishment of linkages for technical co-operation, exchange of personnel, promotion of distance education (evaluation of the ECA publication "UNECADE" and outlines for audio-tapes to be broadcast in Africa and Asia), short-term and long-term plans for co-operation, the use of private consultancy firms in the establishment of institutions and advisory services for further development, non-profit making private distance education institutes and universities.

(b)Handbook for Distance Educators of which various chapters are being drafted:
Nature and scope of distance education, the justification for distance education, methods and practices in distance education, characteristics and needs of distance learners in Africa and Asia, the Psychology of Learning and Teaching in relation to distance education, the distance education methodology for non-formal education programmes, Planning and Designing of programmes, courses writing and editing, administration and financing, the distance tutor, evaluation of distance education programmes.

(c) A very important question to be answered will be connected with the role of the distance tutor (who he is, what he does and needs and how to train him). In this respect, the following topics are proposed for discussion: The Distance Education Programme of ECA with focus on training aspects; evaluation of and comments on the Correspondence Course for Correspondence Course Writers, suggestions for other correspondence courses to be developed in a central place, involvement of African/Asian universities in the training of Distance tutors and other personnel, the development of a strategy for training courses - national and subregional - based on the Handbook for Distance Educators, short-term and long-term plans for training of distance educators, establishment of a private non-profit making organisation for the training of personnel for African/Asian distance education institutions, outline of a curriculum for the training of distance educators.

(d) The Methodology and practices in Distance Education Universities with emphasis on the establishment of an African Network of Open Universities.

Because of circumstances beyond control the Seminar's Steering Committee had to decide to leave out the topic concerning the Handbook of Distance Educators. During the conference this topic has been replaced by a working group on: "Exchange of Distance Education Materials".

An ECA final report on the proceedings of the International Seminar on Distance Education has been published in the meantime. However, this report is very short because of the limitations on conference reports by rules of the United Nations Organization. It is therefore that I am grateful, that the German Foundation for International Development enables me to write a more complete report on this important seminar, including presented papers, discussion proceedings, views of several participants and my own views. I am happy that many of the important ideas, plans, data, views and thoughts expressed in one form or another during the plenary sessions, the committee sessions or even in the corridors of Africa Hall will be printed, published, and distributed by the German Foundation to many organizations, universities and other scientific institutions, to government officials all over the world. Not only the participants, but many more educationists and political decision makers will become aware of the many possibilities distance education systems and methodology can give them in the continuous struggle against ignorance.

The editor

Dr. Jan R. Hakemulder

2. ORIGIN OF THE ECA INITIATIVE

2.1 Past developments

In June 1973 a conference and workshop on Correspondence Education in Africa was organised in Nairobi. This meeting was held pursuant to the recommendations of the workshop on Correspondence Education in Africa which was held in Abidjan in 1971.

In accordance with its work programme and the recommendations referred to above, ECA, in close collaboration with the Steering Committee on Correspondence Education in Africa, took the initiative of organizing the Nairobi meeting. Sixteen African countries (Algeria, Cameroon, Ethiopia, Gabon, Ivory Coast, Kenya, Lesotho, Malawi, Mali, Mauritius, Nigeria, Swaziland, Togo, Uganda, Tanzania and Zambia) sent participants. The Friedrich-Ebert-Stiftung (FES), UNESCO, US/AID, SIDA, the Ford Foundation, the Commission of the European Community, the Rapid Results College, the Centre for Educational Development Overseas, the International Development Research Centre in Ottawa, the Institut of Public Administration Kampala, and the Ontario Institute for Studies in Education were represented with observers. Ten consultants and lecturers participated in the work.

The meeting comprised the Founding Conference to establish an African Association for Correspondence Education and the Workshop for African Correspondence Course Tutors. During the founding conference of the African Association for Correspondence Education arguments both for and against the Association were heard.

a.) Arguments in favour of the formation of the Association

(i) Correspondence education answers the needs of African countries since traditional methods can no longer satisfy the needs. Correspondence educators have to organise themselves and united their efforts to make correspondence education acceptable and effective

(ii) An Association for Correspondence Education could provide a resource centre and offer advice and help to those working in the field.

(iii) An Association would be in a better position to negotiate for aid from international organisations in order to further its aim.

(iv) Since all African countries are faced with the same problem - the development of human resources - it is necessary that all institutions working for that purpose should join efforts and share their experience.

b.) Arguments advanced against

(i) There were fears expressed that the Association would duplicate the work of the African Association for Adult Education (AAAE). It was suggested that perhaps the proposed association should operate in conjunction with the AAAE, since they would otherwise be competing for funds.

(ii) It was also thought that funds would not be available for the proper running of the Association.

The arguments in favour carried and the proposal for the formation of the association was adopted unanimously. It was decided that the name of the association would be: the African Association for Correspondence Education (AACE) and that the association would be a non-profit-making body open to three types of members: ordinary members, associate members and honorary members.

A proposal to include all organisations whether profit-making or not was not accepted. The arguments advanced were that profit-making did not exclude anyone from setting professional standards. Further, it was pointed out that what was important was the identity of purpose in an association. However, one of the reasons for excluding profit-making organisations was that numerous donors were not prepared to provide assistance to organisations other than those which were non-profit-making and were sponsored by the Governments. The final decision was to exclude profit-making organisations.

The objectives of the African Association for Correspondence Education are the following:

a) to promote knowledge about correspondence education and its potential, and to encourage its use and improvement in all forms of education throughout Africa;

b) to promote co-operation between correspondence institutions in Africa;

c) to press for the acceptance and practice of the highest ideals and standards of correspondence education possible; and to lay down such standards and ideals in a Code of Ethics to be adhered to by all member institutions;

d) to promote the collection, documentation and exchange of experience and materials relevant to correspondence education in Africa, and especially to publicise valuable new experiments in this field;

e) to publish and disseminate such materials and documents as are relevant to the development of correspondence education in Africa;

f) to ensure co-operation and exchange of information and materials between this Assication and its members, and institutions and associations concerned with correspondence education inside and outside Africa;

g) to promote co-operation between member institutions in the preparation, production and use of correspondence education materials;

h) to promote research into the use and effectiveness of correspondence education in Africa and to assist individual institutions to prepare
    (i) feasibility surveys and
    (ii) objective evaluation studies of specific programmes of correspondence education; and to promote research into the adaptability of the experience and materials of other parts of the world to African conditions;

i) to promote the training full-time and part-time staff of correspondence institutions in Africa;

j) to hold conferences and seminars for the exchange of information and ideas about correspondence education in Africa;

k) to maintain contacts between the Association and individual African governments and between the Association and intergovernmental agencies, and to advise Governments on legislation for minimum requirements for the establishment of both public and private correspondence institutions.

l) to encourage and support formation of national associations of correspondence education.

At the time of the meeting the following recommendations were accepted:

a) in those countries where no correspondence education institutions were yet in existance, the authorities should make every effort to establish one;

b) in those countries which had prepared projects and programmes for correspondence education, they should be increased and intensified;

c) the African Association for Correspondence Education should promote the role of correspondence courses in Africa, particular through organizing training and information workshops for the public in general and for political leaders in particular;

d) in those countries where several institutions existed they should try to form national associations for promoting education by correspondence;

e) the Association for Correspondence Education should establish contact with the international organisation such as ECA, UNESCO, and OAU with a view to obtaining their continuous support in their effort to promote teaching at a distance in Africa.

It has been, however, very discouraging that this successful conference in Nairobi and the so badly needed African Association for Correspondence Education did lead to no results in 6 years time. There has been only one exception and that was an important one. Since the Association had no funds, it was agreed upon that ECA be approached to release one of their experts to help the Association until such time as it would be able to employ an Executive Secretary.

ECA kept its promise and went even further. The Public Administration, Management and Manpower Division prepared the project document and sollicited with success for the necessary funds. The Government of The Netherlands was found prepared to finance the distance education unit in ECA Headquarters and a Dutch national was recruited and employed in Addis Ababa. The work of the distance educator in ECA started in March 1976. From then on the distance education movement in Africa got a strong dynamic stimulance: the ECA Manpower Section!

2.2 The ECA Distance Education Programme for Africa

The ECA Distance Education Programme for Africa has been discribed in an United Nations publication "UNECADE".++

++ UN + ECA + DE = UNECADE
Some thoughts on Distant Education, Public Administration, Management and Manpower Division,
Economic Commission for Africa, Addis Ababa,
United Nations 1978,

THE ECA DISTANT EDUCATION PROGRAMME

A. Introduction

The Economic Commission for Africa has established a Distant Education Unit within its secretariat at Addis Ababa. Where does this Unit come in, and what is its answer to the problems of distant education in Africa? What is it planning to do? and what has it accomplished so far?

The tasks of the Distant Education Unit are manifold, varied and extensive.

In general they can be described as follows:

1) promoting distant education on the African continent;

2) assisting and advising African Governments and institutes in developing and establishing distant education systems;

3) giving advice on specific programmes.

To be able to perform this task properly, the following strategy elements are important:

1. Research:

a) literature study;
b) data collection.

2. Information and advisory services:

a) establishment of an information centre, specialised in distant education and consisting of a small library and a selection of audio-visual aids;
b) distribution of selected information;
c) advisory missions.

3. Establishment of technical co-operation linkages between African and European/American institutions.

In this connexion there are four possibilities:

i) organization of courses, seminars and workshops during summer recesses;
ii) peripatetic teams of experts providing training and advisory services;
iii) exchange and training of staff;
iv) exchange of materials.

4. Preparation of a correspondence course for the staff of institutes of distant education.

5. Training.

The remaining part of this chapter is devoted to the elaboration of the above mentioned parts of the programme, at the same time as reporting on how the Unit proceeds in implementing them. Section IV C consists of a description of the Unit's plans to expand the project into a multinational programme.

B. Elaboration of the parts of the Programme:

1. Research

As stated above, there are almost no up-to-date data available on distant education in Africa. This makes data collection a necessity. For this purpose an extensive questionnaire has been developed by the Distant Education Unit. On the other hand, the Unit has to be informed about new literature and newly collected data on this subject.

a) Literature study

Studying special literature is a continuous occupation for the expert. The problem here, however, is the fact that there are no funds available in ECA for buying the necessary literature. One of the first things the Unit has done therefore, is to identify donors and apply for help. The action has been successful; the requested books have been or will be supplied by the British Council, the United States Information Service and UNESCO.

b) Data collection

A questionnaire has been developed in order to gather information on which the ECA programme can be based. Questions were included on the purely educational side of the institutions (course production, the process of teaching etc.), their organization and administration, their finance, and some less important general subjects. The most important part of the questionnaire included explicit questions on the problems the institutions have to contend with and their possible solutions.

The final version of the questionnaire was sent to the English-speaking countries in December 1976; a French version was sent out in March 1977. Although, as already noted, the response to the questionnaire has been rather disappointing (about 50 per cent), the returns gave sufficient information to develop a strategy. The questionnaires will also be used in preparing for advisory missions. By using the questionnaires the expert can form a clear picture of the institutions he will visit beforehand. Again, the results of the questionnaire have been used in writing this booklet. In general it may be said that the development and implementation of the questionnaire has been a successful undertaking. Other ways of making contacts for the purpose of data collection have been tried too. Information was sent out concerning all important parts of the ECA programme, and the response of the institutions has been very useful in determining their feasibility and the changes that have to be made.

Data collection for purely scientific reasons is not the task of the Distant Education Unit.

2. Advisory function

The requests for assistance and advice from African Governments and institutions have been overwhelming. To be able to fulfil its advisory task properly, the Distant Education Unit has developed and partly implemented several strategies.

a) Information Centre for Distant Education in ECA. It is planned to set up an Information Centre as soon as the Distant Education Unit has moved to the new extension of Africa Hall, where room for this establishment will probably be available.

The Distant Education Information Centre will have two important components:

i) a mini-library, for the use of the staff of the Distant Education Unit, the University of Addis Ababa and participants of seminars and workshops to be held in Addis Ababa. The main part of this library has been or will be acquired soon.

ii) an audio-visual outfit, mainly for the use of the experts of the Unit during lectures and seminars or workshops. Materials will be also prepared in support of the correspondence courses to be developed by the Centre (audio and video-tapes, films, photographs, slide series).

These materials will be supplied to institutions which do not have the facilities to produce their own materials. A grant of the UNESCO Centre in the Netherlands has been promised to procure the materials for this outfit.

b) Distribution of information. Because of distance it will be impossible for workers in the field all over Africa to make good and frequent use of the Information Centre services in Addis Ababa. Therefore special strategies have been developed to select, reproduce and disseminate the most important and relevant information to institutions in Africa. This information will focus on new developments in the field of distant education. Another way in which the Information Centre will have to try to make its services available to all institutions in Africa is by the production and distribution of a Newsletter. In this way the Unit can keep the institutions informed of developments in distant education in Africa and in its own programme. The best way to produce such a Newsletter will be by a joint venture between the African Association for Correspondence Education and ECA.

Course proposals and outlines have been sent out and will be sent out in the future to stimulate and help institutions. The Distant Education Unit has produced an extensive scheme of a course on Information Transfer called "Prinftra" (Principles of Information Transfer) and has sent it to African institutions for comments, in order to get it worked out and established, where the need and opportunities exist.

c) Missions. Contact between African Governments and institutions and the Distant Education Unit in ECA can be maintained through distant communication. But as with distant education, after some time face-to-face meetings are very desirable.

Several missions have therefore been undertaken in the last few months to Kenya, Uganda, Sudan, Morocco, Tunisia, Tanzania and Egypt. Because of the location of ECA in Addis Ababa, good contact with the Ethiopian authorities is easy.

During the direct contacts views were exchanged on methodologies and the Unit was able to develop and support new ideas, plans and programmes for the particular countries. From the missions it was learned that there are many potential fields in which distant education can offer an effective solution for present educational problems.

3.) Technical co-operation linkages

From the description of distant education in the industrialised world and in Africa, the difference in the development of the two will be clear. Also, it will be easy to imagine the enormous amount of know-how concerning distant education existing in institutions in the developed world. Africa could very profitably make use

of this technical know-how and practical experience, if African institutions are given the chance to do so. One example is the co-operation between the Mauritius College of the Air and the International Extension College. The Distant Education Unit wants to establish technical linkages between institutions in the developed world and African institutions through which the exchange of information and materials and staff training can take place.

a) Summer recess courses

A small team of American and European experts, together with some African colleagues might give a series of lectures and organise seminars and workshops. Contacts will be made and priorities will be determined by ECA.

b) Peripatetic team

A second possibility is a multidisciplinary team of experts visiting four African countries for one month and advising Governments and institutes on the development of distant education programmes.

c) Exchange and training of staff

This is the most intensive way of co-operating. Here experienced experts will work for some time in African institutes and African educationalists will be trained in institutes in Western countries.

d) Exchange of materials

Another possibility is to send out sample correspondence courses. This material can then be analysed, which can be very helpful in studying the different techniques. Research can be done into what extent these courses are of a universal character and not tied to a specific culture and can therefore be used in African countries as well. This can be time and money saving.

The elaboration and implementation of this strategy is not an easy task. Some research was undertaken to find out which African institutions would like to establish such technical linkages, with which institutions and for what purposes. Questions to this effect were included in the afore-mentioned questionnaire.

It was established that about 70 per cent of the responding institutions have no contacts with other institutions whatsoever. The remainder have already established contacts with institutions in the industrialised world. The most frequently mentioned were the International Extension College and the Open University, both in the United Kingdom. Also mentioned were some universities and institutions in the United States, the United Kingdom, the UNRWA/UNESCO institute in Lebanon, an institution in Poland and one in New Zealand. Also, some contacts exist between institutions in Africa itself, although mainly within the same country.

All institutions except one would like to establish a good liaison with an overseas institution. All institutions having contacts already would like to establish such linkages just the same. The one exception is a UNESCO project which does not need any assistance. The institutions hope that technical linkages will assist them in training staff, and developing courses and audio-visual aids. They also need other professional assistance and financial aid.

Most institutions prefer to establish links with an institution in Europe. Also often mentioned were North American and Australian institutions. Government institutions are preferred to private ones. In short it can be said that one party to any future technical linkages is anxious to establish them. The Distant Education Unit, in investigating the desire of institutions and universities in the industrialized world, to establish links, made very useful contacts for itself. A proposal concerning the technical linkages was sent to a great many institutions and universities. The first reaction of a number of 35 prominent American universities has been very positive. This reaction was partly based on the understanding that USAID would take care of the expenses involved in this co-operation. When the project proposal concerning the proposed programme for technical co-operation and institutional linkages between African and overseas institutions for distant education was sent out, however, USAID had changed its priorities and its contribution could no longer be counted on. The contacts with the American universities have been maintained, however. Several offers can be used, as soon as the necessary funds are found.

Although the programme as such had a good reception, the financing met with great difficulties. An effort to interest the Ford Foundation in the programme has also failed. More or less the same objections apply to the contacts with institutions in the United Kingdom where the Government makes its contribution to the United Nations, and no increase of this budget can be expected. Nevertheless excellent relations have been developed with the International Extension College, Cambridge, resulting in a constant flow of information and exchange of data. The IEC has experience in five African countries and has achieved very good results there. As its sole reason for existence is the wish to make available services, advice and information to the developing world, IEC is willing to establish contacts with African countries. However, funds will have to be found..

Another very fruitful form co-operation has emerged between the Open University and ECA. The Open University's Consultancy Service will be changed into a Special Centre, whose main concern will be to give technical assistance to Governments in the Third World. This special centre will not only have a full staff itself, but it can also rely on the assistance of the total staff of the Open University at all times.

The three main fields of this Centre are:

- technical assistance and training;
- research and development in the field of distant education, specially directed to the problems in developing countries;
- research and development of strategies in the field of technical assistance and the transfer of innovations.

These developments have some implications which are relevant for the establishment of the earlier-mentioned co-operation.

The Open University can give technical support to African institutions, and assist in training their staff. The Open University itself is not able to finance this kind of project, but it is able to apply for funds from UNESCO or ODM. The Open University and ECA have agreed to combine forces in every possible way. Co-operation is planned to take place in Egypt and Morocco, especially in connexion with plans to establish an Open University in Africa. The Open University and the Distant Education Unit in ECA constantly keep each other informed on developments in distant education in general, and in Africa in particular.

Excellent contact has also been established with the British Council in Ethiopia. The British Council has assisted the Unit in many ways and is willing to advise other British Councils in Africa to assist with distant education programmes, if sound projects are identified by the Distant Education Unit. Some contacts have been established with institutions in the Federal Republic of Germany. To maintain contacts with French universities has been difficult but now efforts will be made as those contacts are extremely important for the French-speaking countries in Africa.

Good and lasting contacts exist with two of the largest firms for correspondence education in the Netherlands; Philips (for information and data on audio-visual aids); and the University of Leiden in the Netherlands. It is planned to form a multidisciplinary team of Dutch experts in co-operation with these institutions. Again, the lack of funds is a prohibiting factor, and one of the very important tasks the Distant Education Unit has set itself is the identification of donors. In that, through its questionnaire and the many contacts with overseas institutions, the Unit has found that the establishment of technical linkages is desirable and feasible, and that this strategy could be implemented immediately but for the lack of finance. Funds have to be found, by the parties concerned together with the Distant Education Unit in ECA.

4.) Correspondence course for correspondence educators

The idea of writing a correspondence course for correspondence educators has become a very important pillar of the strategy of the ECA Distant Education Unit. From an analysis of the requests for assistance from African countries, it emerged that a large number of requests were similar: organising seminars and workshops for course writers, editors, management of institutes and psychological and educational backgrounds in distant education.

It was impossible to meet all these requests, the reason being the lack of manpower and lack of funds. Moreover the results of a number of seminars and workshops are doubtful. A number of seminars appear too superficial and the participants remain too free. The time for absorbing lectures is too short and time to study is in most cases non existent, so that knowledge was acquired in too short a time, is not based on thorough study and will therefore not remain permanent.

A much better method - perhaps the best in this particular case - is to develop a course for distant educators. This strategy is time and money saving, it will be a better and more effective methodology to transfer knowledge and skills and a large number of interested people can be reached. This method also has the following advantages:

a) It matches the principles the programme is propagating. It is inconsistent to recommend methods of distant education and not to practise them.

b) Such a course should also be a model course.

c) Many distant educators who have never followed a correspondence course themselves can acquire a better understanding of their future students.

To develop such a comprehensive course for Distant Educators will take time. Therefore it has been decided to take as the starting point independent part of such a course: a course for correspondence-course writers. From Government requests it was found that the most urgent need in African distant education systems is the training of writers.

The course consists of nine lessons, of which each course has three parts:

a) the part directed to the writing of courses (This is a revision of the course developed by the International Extension College)

b) the part containing background information on the psychology of learning and teaching.

c) a part containing historical, pedagogical and philosophical backgrounds.

The drafting of the course has nearly been finished. The first four lessons have been sent to several African institutions for comments. Some points will be adapted to the wishes and ideas of these institutions before reproduction and distribution.

The comments of those four lessons were on the whole very positive but the part "historical, pedagogical and philosophical backgrounds", however, has resulted in controversical reactions. Some of the institutions thought this part was not necessary and even that the information was dull. Other institutions, however, especially liked that part, because it will give course writers a broader grasp of their educational work. The entire course for the writers will be completed and a prototype distributed to the institutions. The institutions themselves can then decide how they are going to use this course.

In the meantime efforts will be made to secure the assistance of African specialists to develop an overall course for all specialists working in distant education institutions.

5.) Training

According to the views of the Unit the main part of the training of the staff of the institutions will have to take place by means of distant education and the relevant courses are being planned. Another form of training can take place when the Programme of Technical Linkages becomes operational. In some cases face-to-face meetings will be needed. This can be done by lectures in universities, and seminars or workshops to be held in African countries on the regional, subregional, national or international level. Especially in the last case, the Units' contacts, as well as its Information Centre could be very useful.

3. PLENARY SESSIONS OF THE INTERNATIONAL SEMINAR

On 3rd September 1979 the International Seminar on Distance Education was officially opened by an Opening Address delivered on behalf of Prof. Adebayo Adedeji, Executive Secretary of the Economic Commission for Africa. The address was read by Mr. S. I. Edokpayi, Chief of the Public Administration, Management and Manpower Division.

3.1 Opening Address: Prof. Adebayo Adedeji

It gives me great pleasure to welcome you all to Addis Ababa and to the United Nations Economic Commission for Africa on the occasion of this important International Seminar on Distant Education. I sincerely hope that this gathering will be beneficial both to you as individual experts and as representatives of your Governments, organizations or institutions, and to the peoples of the African continent in particular in their efforts to develop their human resources through the educational systems.

This Seminar has been made possible largely by the generosity of the German Foundation for International Development and the Ministry of Development Co-operation of the Netherlands. I would like to take this opportunity to thank them for their continued financial support to ECA in the realization of some of its planned programme activities.

Ladies and gentlemen,

As we are all aware, several sections of the Charter of the United Nations deal with education and up-bringing and our rights in this regard. Education is a principal preoccupation of one of the specialized agencies of the United Nations, UNESCO. Education as a basic right of man has been generally accepted throughout the world, particularly since the Second World War. Even though this fundamental human right has been accepted generally, only 60 per cent of the children of the world go to school. Of course, this percentage is much lower for the African continent. About 780 million people above the age of 15 years - nearly one third of the adults in the world - can neither read nor write. As the world population is growing every year, the absolute number of illiterates is increasing, despite the literacy programmes Governments, UNESCO and other agencies have been organizing in virtually every country.

Education is no longer regarded as a preparation for life only. Rather it is seen more often as a way of life. Because of this, the old distinction between in-school and out-of-school education has diminished and UNESCO is increasingly emphasizing life-long, integrated education. The concept of life-long education has been developed by the Edgar Faure Commission initiated by UNESCO and has been propagated by the United Nations. In its report "Learning to Be". the Edgar Faure Commission suggested flexibility and democracy as key words for States building up educational systems. And these words aptly apply to distant education in providing life-long education related to the world of work and the environment in which we live.

For a very long time in the history of mankind, the basic principle of teaching has been direct contact between a person who has some particular or general knowledge, experience or skills to offer and a learner or group of learners. There was always direct human contact between the teacher and a student or group of students. Schools, where a teacher could teach say 30 or 60 students, were a way of offering education to a chosen few, the elite. However, most people have - as far back as can be traced - learned informally how to manage their lives: from parents and grandparents, from the household, friends and tribesmen. Thus, the informal educational system has provided most of the world's population with the necessary knowledge and skills to enable them to exercise a degree of control over their environment and to fend for themselves.

The informal approach to education and training has proved even more adaptable to changes in culture. Learning at school was largely memorizing what the teacher taught. Practising the subject learnt was regarded less important than memorizing the facts taught. In most cases the student found himself placed in a passive role, the role of a listener. The situation changed drastically with the invention of writing and printing. Before printing, books were even more expensive than teachers. But as a result of the printing press books became cheaper and spread more and more among people who were willing and able to read. This meant that students became more independent of the tutor; they could also learn what other scientists had to offer through the medium of the printed word. We can certainly regard the invention of printing as the beginning of the process of democratizing education.

A second development in educational technology, the emergence of the news media, however, seems to have had even greater implications in further democratizing education. Over the current century, changes in technology have made it more difficult for informal systems to suffice in providing the necessary education and training people needed. The demand for formal education has increased drastically throughout the world. Parents see the school as a way to the mastery of modern technology and at the same time as a way to earn more money and attain better living standards.

The demand for school places, however, is very much bigger than the capacity of many economies to supply them. It is for this reason that educational planners now agree that the traditional formal education system can never meet the enormous demand for education and training. The need for education is generated both by the people themselves, who want to improve their knowledge and acquire new skills, and by private and public enterprises, which need an ever higher level of qualified workers with skills and know-how. Technical changes in medicine, in agriculture and in engineering for example have opened new ways of life to many people, but ones which are open to them only if they have received some relevant education and training.

The normal, traditional school system cannot cope with the large demand. It is not effective enough; it is too expensive; and the available teaching force is not used efficiently. Even the industrialized countries are encountering problems in financing this costly and not very efficient school system. Many African countries are faced with the "world educational crisis" and find that the formal educational system has not been able to produce the kind of labour force and citizens needed. On top of that these countries are facing serious economic problems such as inflation and unemployment, with the result that the inadequate living conditions of the mass of the people are even worsening.

Therefore, it has become more and more urgent to find alternatives to educating the people, so that men and women can improve their lives by using new skills to raise production, income and social standards. This has resulted in some emphasis by educational planners on non-formal education, aiming at upgrading working skills, the mastery of the physical and social environment and the development of the individual personality.

In the context of African development we need both the formal education system and non-formal education. The problem, however, remains how to develop human resources as much as possible and to operate the principle of equal opportunities for everybody. This has led to the search for alternative methods of education which can reach more people, or reach different people, and do so more cheaply. Distant education seems to offer these possibilities for both formal and non-formal education, and ECA - in close collaboration with the African Association for Correspondence Education - is willing to play a promotional role in the development of this type of education on the African continent.

The term "distant education" is used to describe various forms of study at all levels. One of the main characteristics is that there is not a continuous and immediate supervision of tutors, but there is planning, guidance and tuition of a tutorial organization. It is an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. This means that an intermediary is always used in the contact between tutor and student. The question may be asked: "why not supply the students with textbooks"? Distant education uses one or more media: the correspondence lesson, the sound cassette or tape, lessons by radio or television, etc. If, however, we are trying to prepare a package of materials which will teach effectively, then we are forced to think about the structure of the content and the structure of the media. Experience has proved that the most appropriate kind of structure for distant education is quite different from that of an orthodox textbook. Where the function of most textbooks is to present the author's view, the function of distant teaching materials is to stimulate the student to activity which will enable him or her to learn.

The distant course guides and teaches and has to give complete explanations with examples; it has to contain exercise and has to refer to what the student has already learnt to master. In this way the distant course is a substitute for both a textbook and the exposition of a teacher. But this means that material offered to a student in the absence of a teacher needs to be structured in such a way that the student is encouraged into learning activities which go beyond passively reading, listening or observing. The development of an appropriate structure makes effective distant education possible.

It seems to me that first of all we have to be aware of the pre-knowledge and attitudes of the students. Combined with this we have to spell out exactly the objectives of the study. This knowledge must be the basis of all decisions on subject matter, structure and modes of presentation. And, furthermore, we can then decide on study methods and media to be used in the distant study courses.

Good distant education also depends on a system of feedback. No matter how carefully educational materials are prepared, they will not meet all the needs or answer all the problems of the many students for whom they are intended. A system of feedback provides some sort of help to students who need extra assistance or information. It also enables the producers of distant education materials to do research on the success and effectiveness of the programme in reaching the planned objectives. Feedback is a necessity both for learners who are facing learning difficulties and need support to overcome them and for the teachers who do not know otherwise the effect of their teaching. Feedback, although difficult to organize, is the way of creating a dialogue between student and educator in a distant education system.

The attractiveness of distant education for the economist lies in its use of mass-production methods and the changes which these bring to the structure of educational costs. By using traditional classroom methods, the costs of education rise in proportion to the number of children going to school. When every 30 or 40 children need a teacher and a classroom, salaries and buildings swallow up most of the educational budget. With written courses and broadcasts, on the other hand, the marginal cost of each extra student is very low. In fact, if radios are widely distributed, then it costs no more to broadcast to a million students within the reach of a transmitter than to a hundred. However, distant education is not necessarily a cheap way of solving educational problems, but in most cases it is considerably cheaper. Several studies have shown that where direct comparison can be made, distant education methods can work out cheaper than their orthodox alternatives. In the Middle East refugee camps, for example, it was possible to compare directly the cost of producing a trained teacher through pre-service, residential courses and through in-service, distant education courses. The latter was half the cost of the former. A study of the cost of the British Open University showed that the production of graduates is 70 per cent lower in cost than in the regular British universities.

Measuring the effects of education is more complex than measuring the costs. With formal courses it is possible to evaluate examination results and the outcome is consistent. If students keep working to the end of a distant education course the chances of passing the examination are high, and sometimes higher than for students who have studied in a conventional way. But many students do not continue to the end of their courses, and so never sit the examinations for which they were preparing. Motivation differs from person to person and from society to society. Therefore two-way communication has to be built into the distant education systems to reduce the percentage of drop-outs. It is very important for distant educators to motivate the students by two-way communication and by the course materials itself.

We in ECA are convinced that one can be reasonably optimistic about the effectiveness of distant education in extending and improving education at all levels. Distant education is relevant to the twin problems of quantity and quality which beset educational planners around the world and in Africa in particular.

Ladies and gentlemen,

The African countries are looking forward to the benefits of distant education systems. The fact is that today the African economy is still underdeveloped: low income per capita; many people working for a pittance in agriculture and few in industries; low level of production in all sectors; a high dependence on only a few export commodities; very wide gaps between traditional and modern ways of production and management; high degree of illiteracy; low level of health service, etc. African Governments are well aware of the problems in manpower development and skills acquisition. These are only a few examples of Africa's basic problems, but they suggest the magnitude of the challenges which are confronting African countries. We need the initiation of self-sustaining processes of development, of economic growth and welfare for the masses of the people. This would free the African people from the frustrating dependence on others. Therefore, we will need to train manpower to develop our own technology; to create the essential institutions for social and material development and for inventions and innovations; to increase food production, and certainly to develop strong self-sustaining economies and Afric's own life styles.

Ladies and gentlemen,

A major problem that we are facing in the establishment of distant education systems in Africa is the lack of trained educators in this field. I am happy, however, that in Africa as well as in Asia we have some top-level experts in the methodology of distant education. But they are two few to fulfil the enormous task of educating the masses. In this connexion, your first task will be to develop strategies to train more distant educators. In your recommendations you may draw up plans to train the necessary manpower in institutions through a series of workshops and seminars for which the Handbook for Distant Educators, presented for your consideration, may be a basis. On the other hand, you also have to decide on how to use distant educational courses and strategies to train distant educators, and for this reason a Distant Course for Correspondence Course Writers is also before you. Next to this you will have to analyse the possibilities for international co-operation. The development of good courses needs a good deal of research and evaluation. It is realized that small and poor countries lack the personnel and funds to develop such courses. But groups of States working together can do it and co-operation is needed to use the available experts as well as limited funds as effectively as possible. This concerns in the first place the mutual relations among developing nations in Asia and Africa and also the relations with donor countries and organizations. We have to state our needs clearly so that it is understood what our objectives are and how we intend to achieve these objectives. If we are able to make our case understood, I am sure that our colleagues overseas will be ready to support our own efforts.

International co-operation will also be one of the topics during the November conference to be held in Birmingham, United Kingdom to celebrate the tenth anniversary of the British Open University. It is, therefore, a pleasure for me to announce that the German Foundation for International Development and the British Council have made it possible that six of the participants here will be selected to go to Birmingham to represent all who are assembled here. They will bring the results of the Addis Ababa Seminar to the attention of the meeting in the United Kingdom. As an example of where we need international co-operation very much I would like to mention the idea of establishing a Network of African Open Universities. You are requested to explore the possibilities of such a network and you will have to decide on strategies, participation, modalities and requirements. In this connexion you may consider the need for a consortium of European Open Universities to be formed to assist and advise the African network.

Ladies and gentlemen,

Having given you an outline on the main topics for this Seminar, I have the impression that a great task is waiting for you in the coming two weeks. It is the hope of the organizers that the deliberations will involve a valuable sharing of knowledge and experience, and that there may emerge at the conclusion of your deliberations a number of recommendations of real significance regarding future co-operation in this area within the African continent and between African States and other countries and regions of the world.

I thank you.

3.2 Aims and Strategies of the Conference: Dr. J.R. Hakemulder

In the Opening Address Professor Adedeji outlined several topics which he asked the delegates to discuss:

(i) proposals on methodology and strategy for the training of distance educators; in this connection the Executive Secretary mentioned organizing of workshops, but also the use of distance education methods, such as a correspondence course for correspondence course writers.

(ii) possibilities for international co-operation among developing countries, as well as relations with institutions and organizations in industrialized countries.

(iii) the establishment of a Network of African Open Universities. This outline was completed by Dr. J.R. Hakemulder, ECA Regional Consultant for Distance Education and conductor of the seminar. He referred to the Executive Secretary's opening address and the objectives mentioned in conference papers such as Aide-Memoire and Information for participants. The consultant summarized the aims of the seminar in the opinion of the ECA-Secretariat and he also explained the meeting's strategies:

A) Action on country level

All African and Asian experts will go back to their institutions in their respective countries after two weeks of deliberations in ECA Headquarters. The wish and hope of the organizers of the seminar is that through exchange of experience and lectures the experts will return with new ideas, plans, strategies, materials, etc. Therefore ECA had invited well-known scholars/educationists from various parts of the world. These consultants were not only expected to present papers in plenary sessions, but also to participate in the discussions in committee sessions.

As a next point in this connection Dr. Hakemulder mentioned the still existing opposition against distance education. He was of the opinion that this conference could supply more ideas to convince decision makers back home to introduce or expand the use of distance educational strategies. But ECA also is planning to provide materials in promoting distance education. In the ECA Distance Education Programme has been stated that two ways of promotion are essential:

(i) the promotion in the direction of decision makers, such as government officials and colleagues in universities and other educational institutions.

In this conext ECA has published: "UNECADE, Some Thoughts about Distant Education", a publication which has been distributed all over the African continent. UNECADE turned out to be a "best-seller". A French version was produced and after that a second edition will have to appear. Therefore Dr. Hakemulder urged the delegates to make their comments so that these could be included in a next edition.

(ii) the promotion in the direction of future consumers (students and parents). The best strategy in so far ECA is concerned would be to produce audio-tapes and to present these tapes to radio stations to be broadcast. ECA would like to get ideas from the seminar's delegates on what has to be the content of programmes on those tapes.

B) Training of Personnel

The problem nearly all institutions in developing countries are facing is: on one side the demand to produce more and excellent courses, but on the other side the lack of trained staff to produce them. Dr. Hakemulder mentioned the 1976 ECA research on the position of distance education in Africa; 60 per cent of the institutions responded on the extensive questionnaire and of 15 per cent ECA got the needed data through missions. The most remarkable result was the enourmous need for trained staff in distance education institutions all over Africa: course writers and editors, managers of institutions, tutors, etc. Other needs were: to find ways and means for two-way communication and evaluation of courses. But on top of all needs was without doubt and without exception: training of course writers. This problem can be solved in the face-to-face teaching way by organizing workshops and seminars. But this strategy takes much time and funds. Therefore ECA has presented a Correspondence Course for Correspondence Course Writers.

C) International Co-operation.

There is need to establish lines of communication and co-operation. The delegates were asked to think about the sharing of experience, materials, methods and of experts. In the deliberations on technical co-operation the following possibilities have to be included:

i) inter-African and inter-Asian co-operation;
ii) co-operation between African and Asian institutions;
iii) the technical assistance from European and American institutions.

D) A Network of African Open Universities.

Dr. Hakemulder stated that it may be premature to speak of a network of African Open Universities since this kind of institutions does not yet exist in Africa. Therefore it would be more realistic to talk about the use one can make of existing institutions and systems. In this context it will be of importance to list courses which are really needed: e.g. do we need university courses or courses at a lower level but based within the extensions of the African universities. ECA is of the opinion that such an African network needs to get the assistance from institutions in industrialised countries. Therefore ECA proposes to stimulate the formation of a Consortium of European and American Universities with the aim to give assistance to the African Network.
The ECA consultant gave an example of the strategy of the seminar and listed the following ways of meetings:

(i) Plenary sessions in which papers will be presented, followed by discussions;

(ii) Panels of delegates, in which nearly all delegates will participate. There will be continental and country panels and also some panels on one specific subject. The country panels were requested to concentrate on three points out of a by ECA distributed criteria list for country information, namely Experiences with Distance Education, Problems and possible Solutions, Future Developments and Plans.

(iii) Committee Sessions: A major part of the available time has been reserved for discussion in groups to develop tools, strategies, methods etc.

The subjects for the three committees were:

Committee 1 : to analyse the experiences gained in distance education projects, and to consider means of promoting international co-operation at all educational levels;

Committee 2 : to consider staff training and development in support of distance education projects;

Committee 3 : a) to discuss the role of the University in distance education, and
b) to consider the possible formation of an African Network of Open Universities. For this purpose the Secretariat had prepared a draft paper

Each committee was asked to appoint a Chairman and a Rapporteur.

3.3 Appointment of Officers.

The Conference appointed the following delegates as officers:

Chairman : Dr. M.M. Kaunda (Zambia)
Vice-Chairman : Prof. Bakhshish Singh (India)
Ato Girma Bayouh (Ethiopia)
Rapporteur : Mr. Greville Rumble (United Kingdom)

A Steering Group consisting of the above mentioned officers together with the following persons were then appointed:

members of the ECA Secretariat: Mr. S.I. Edokpayi,
Dr. J.R. Hakemulder,
Dr. J. Bukhala,
Mr. C. Grey-Johnson,

Dr. J. Heising (Federal Republic of Germany)
Mr. Pereira (Singapore)

3.4 Address by Professor Dr. B. Holmberg

Fernuniversität (Distance University) Hagen, Federal Republic of Germany

3.4.1 Distance Education, a Concern of Developing Countries

There are several reasons to regard distance education as an approach of particular interest to developing countries. That study at a distance by correspondence has been proved to be highly effective, that it is a remarkably economical form of study and that it can have a mass-communication character are facts that stand out in this context.

Let us first consider two questions of decisive importance for our judgment of distance education as an approach suitable for developing countries. Those questions are: What is distance education in essence and what can it contribute? Let us then look into the international concerns and those of developing countries.

1. The essence of distance education

The first of these questions, the one concerning what distance education really is, should, I believe, be answered like this:

Distance education is characterised by non-contiguous communication. This is expressed by Ripley Sims in the following way: "The unique and distinguishing feature in the correspondence educating process is that the learner is at a distance from the teacher for much, most, or even all of the time during the teaching-learning processes."[1]

The basis of the distance study is a pre-produced course, which is usually printed but which can also consist of presentations brought about by other media than the written word, for instance audio or video tapes, TV or radio programmes, experimental kits. Experience shows that a printed course without any sophisticated auxiliary media can be highly effective. The course aims at being self-instructional, i.e. at being accessible for individual study without the support of a teacher. It can be self-contained or can be a guide to the study of set - or alternatively suggested - texts. To stimulate critical approaches and duly allow for the pluralism of view-points the latter form of presentation introducing competing schools of thought seems particularly valuable in university study.

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[1] Sims p. 4

Organised, regular and frequent two-way communication takes place between the students and a supporting organisation, i.e. the university, college or school, with its tutors and counsellors. The communication is in most cases based on assignments for submission, which are commented on and promptly returned to the students with constructive advice, but also takes place at the initiative of students and individual tutors. The most common medium used for this two-way communication is the written word.

Distance education caters for individual study. This, however, is what all education must do even in the cases when teaching is provided in classes or groups. Compare Ripley Sims's dictum: "... in whatever society, for whatever purpose, by whatever means, under whatever ideology, the essential objective in educating processes is learning by an individual learner ... the methodologies or strategies employed are only incidental to this end".1/ Distance education expressly serves the individual learner in the study he does on his/her own, however.

As the course developed can easily - and to great financial advantage - be used by great numbers of students, distance education can be - and often is - a form of mass communication.

In preparing a mass communication programme, the approaches of industrial work are naturally applied. To these belong planning, rationalising procedures, division of labour, mechanising, automation, controlling and checking. Peters has made a systematic study of these approaches comparing them with industrial work. He describes distance study as an industrial type of teaching and learning.2/

The technological approaches implied do not prevent personal communication of a conversational character from being the backbone of distance study. This applies even when computerised communication occurs. I regard organised distance study as a mediated form of guided didactic conversation.

1/ Sims p. 18

2/ Peters has developed this theory in a comprehensive German treatise and in a short English paper (see the references at the end of this paper).

Distance study is self-study, but the student is not alone; he benefits from a course and from interaction with tutors and a supporting organisation. The presentation of study matter (indirectly) and the written interaction between the student and the tutor and others belonging to the supporting organisation (directly) provide the instruments of conversation. The conversation is thus both real and simulated. The simulated conversation is not only what Lewis calls internalised conversation caused by a study of a text ("As we mull things over quietly and in solitude, we are actually holding a conversation with ourselves"[1]) but is a relationship between the course developers and the students created by an easily readable and reasonably colloquial style of presentation and the personal atmosphere of the course, superficially characterised by, for instance, the author(s) referring to himself/herself/themselves as *I* or *we* respectively and the students being spoken to as *you* ('I recommend that you ...'). Questions and replies, suggestions and references to problems known to the students belong here. This style of presentation stimulates activity and implies reasoning, discussing pro et contra, referring to the student's previous experience and thus avoiding omissions in chains of thought. Revision tasks and self-checking exercises also belong to the simulated conversation. The conversational style is characterised by a certain redundancy in that compactness is avoided. The contents is structured verbally and/or by typographical means.[2]

2. What can be achieved by distance education?

The second question referred to at the beginning of this paper is concerned with what distance study can contribute. There is much prejudice about the assumed limits of the range of activity of distance study. Let us for practical reasons consider the usefulness of distance study in the three domains of study objectives analysed by Bloom & Kratwohl.

In the *cognitive* domain, which concerns the acquisition of intellectual knowledge, the effectiveness of distance study is seldom challenged. It is well known by now that here distance study is at least as effective as any other form of teaching and learning.[3]

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[1] Lewis (1975).

[2] This theory is further developed in Holmberg (1978).

[3] Childs (1965) and Granholm (1971) provide ample evidence of this. "One thing of which we may be certain is that correspondence study does an excellent job of subject matter instruction" (Childs, 1965, p. 8). Cf. also Childs, 1971, pp. 245-248.

Some psycho-motor objectives, i.e. skills like surgery or the capacity to handle dangerous chemicals, machinery etc., do not lend themselves to correspondence study, whereas other skills do (drawing and typewriting for instance). In some technical subjects the use of laboratory kits has proved very advantageous and has eliminated the need for much residential laboratory work.

In the affective domain, which is concerned with emotions and attitudes, it would seem to be evident that non-contiguous communication has less power to influence students than face-to-face meetings. The question is to what extent and in what areas distance students should be subjected to emotional influence. Naturally educational policy cannot disregard the requirements of society to provide some sort of moral upbringing. On the other hand, the indoctrination character of moral upbringing cannot be explained away. The only thing society can do to defend itself and its citizens from brain-washing is to make sure that reasonable plurality characterises this upbringing and the general socialisation brought about.

The great question here is to what extent this concerns distance education for adults, which is, of course, our normal target group. I would submit that adult distance students are automatically provided with the kind of general socialisation acquired by adults in their normal social life - through their family, job and the company they keep - and that in planning distance study at the university level we are entitled to limit our socialisation efforts to what academic life, study and research require. The typical distance student is an adult with a number of social responsibilities and commitments.

On the other hand, a specific academic socialisation effect is no doubt expected of any serious study. This is concerned with the methods for unprejudiced search for truth, the use and recognition of sources of knowledge, critical scrutiny of theories and arguments and similar habits and approaches. There is every reason to assume that academic socialisation is adequately catered for by distance study.[1] In one aspect distance study would seem to have special socialisation potentials in this so-called academic sphere. What I have in mind is the training in autonomous study. We seem to have reason to assume that our student's work on their own is a habit-forming experience which develops independence. As far as timing is concerned this independence is normally an indisputable fact. A free choice of courses to be selected for study may be considered another manifestation of this independence, but in this respect distance study does not differ much from other types of adult education.

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[1] Cf. Holmberg (1976).

What we must look further into - if there is any substance in our claim that independence and autonomy are typical of distance study - is how students themselves can influence or even independently decide not only how they are to study but also what, the latter by selecting their own learning objectives. Will it be possible to provide a wide range of study opportunities with clearly defined and declared study objectives for each small unit and make a completely free choice of such units available to students in individual combinations? Constructive approaches engaging the students in the selection of study objectives have been developed both by Potvin and Ljosa & Sandvold. Potvin "denies the institution and the tutor the right to prescribe what the learner should learn and how he is to learn it".[2]

How this philosophy is to be practised in a system of fairly fixed curricula is certainly worth considering. The problem concerns not only the course development, for which a modular system appears practical, but also the two-way communication.

It is possible, though seldom practised, to provide an extensive battery of assignments, from among which students are encouraged to select those that they find particularly interesting or that coincide with their specific study objectives. This could be one way to bring about the student autonomy that has been discussed above. If students were to select their own study objectives, on the basis of this selection could concentrate on the corresponding parts of the course and were offered assignments related to the parts chosen or even alternative assignments within their chosen study areas, then the autonomous student would be provided with more appropriate study opportunities than distance education is normally capable of offering.

A less satisfactory but more common method of individualisation is simply to make assignments for submission voluntary without providing the students with selection instruments related to individual study objectives.

3. International concerns

The problems discussed are, I believe, international concerns. It is evident that there are vast potentials for on one hand effective mass teaching, on the other hand highly individualised study inherent in distance education. To make use of these possibilities in different cultural settings is far from unproblematic, however. The general educational and social traditions and attitudes vary and are very powerful in official systems in shaping study regulations, probably even more so than tangible educational needs. One reason for this is that parallelism with conventional universities and schools is considered important and may even be vital for academic recognition and prestige.

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[2] Potvin p. 30

4. The concerns of developing countries

It seems reasonable to assume that all the issues discussed so far are relevant for developing countries. However, there are some aspects that should be particularly stressed. They concern the influence of traditional thinking on the use of face-to-face sessions as supplements of distance study, the importance of proper two-way communication in writing, the economy of the large-scale approach, the media available and the application of distance study to non-formal education.

There can be no doubt that face-to-face sessions can be valuable and that they are even sometimes necessary (for laboratory experiments in chemistry, for instance). I should like to warn against excessive use of face-to-face sessions, however, as a teacher in class tends to take command and to double the teaching provided in the correspondence course. This usually both confuses and delays the serious distance students. To be profitable, combinations of distance and oral tuition have proved to need complete integration based on systematic planning allocating the two approaches to well defined tasks in the study process. What has been said above about the potentials of distance study in the cognitive, the psychomotor and the affective domain may serve as a guideline for this allocation. The fact that tradition favours face-to-face sessions is no reason to plan them; only careful considerations along the lines discussed under Section 2 above should guide us here.[1]

When the results of distance-study programmes are not satisfactory it is important to improve the distance teaching, not to supplement it with face-to-face teaching. On course development I wish to refer to what I said under Section 1. Very often the weakness of a distance-study programme is to be found in the form of two-way communication provided. If the assignments the students submit for correction and comment are regarded as examinations and are merely ticked off, then there is little chance that the study will be successful, and if the students have to wait several weeks to receive their corrected papers with their tutors' comments, then we can be almost certain that the results will be poor.

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[1] Cf. Holmberg (1977b)

Immediate feedback would naturally be ideal, but can be attained only by tele-communication. Written communication and the use of the post office, the means of communication that is, as a rule, available, have proved very effective, however. Students seem to accept and profit from comments and corrections given with 7-10 days after an assignment has been completed and sent by the student. They are regularly dissatisfied and less successful if they have to wait longer. Rekkedal has shown evident correlation, which is statistically significant, between short turn-around time and completion rates. The lesson is that we need prompt correction and commenting of students' papers as well as helpful, personal comments and advice in our non-contiguous communications with our students.

As no lecture rooms are required for a distance-study programme, as students need not travel to school and as they have no extra residential cost to pay, it is evident that distance study has financial advantages. It can be made very economical if it is to some extent centralised so that each correspondence study centre caters for large numbers of students per course. Then it will be possible to afford a fairly sophisticated type of course development and nevertheless attain low costs per student and course. Large centres usually need a considerable staff of part-time tutors within easy reach so that no delays are caused by sending assignments between centre and tutors.

The cost-effectiveness of distance study is remarkably high, as has been shown by, among others, Wagner in his analysis of the British Open University. Cost-effectiveness must be of great importance in developing countries. Proper use of distance study with good self-instructional courses and prompt, amiable and helpful instructive two-way communication would therefore seem to be extremely attractive to developing countries. Erdos and others have developed organisational plans of evident relevance for educators in developing countries anxious to create cost-effective systems of distance study.

It is worth pointing out that the form of distance study that consists of old-fashioned correspondence study making exclusive use of the printed and written word without any use of less easily available or more expensive media has proved most effective (as witnessed by Childs and others). It would seem to be evident that this is a strong argument in favour of correspondence study in developing countries.

Finally I wish to stress that distance study need not - and should not - be limited to formal school and university programmes. It is eminently suitable for vocational subjects and for subjects of relevance for the personal lives of students, for family life and social life. Agricultural and technical courses as well as courses on nutrition, hygiene and family planning would seem to meet some of the needs felt in developing countries.

Borje Holmberg

Distance Education - a Concern of Developing Countries

Summary

The main characteristics of distance education are described in the terms of 1) non-contiguous communication, 2) pre-produced self-instructional courses, 3) organised two-way communication, 4) service for individual study, 5) mass communication, 6) industrialisation of teaching and learning, 7) as a mediated form of guided didactic conversation.

The potentials of distance study in the cognitive, psycho-motor and affective domains are described with references to research findings. The effectiveness of distance study for the attainment of cognitive study objectives, some psychomotor objectives and for academic socialisation is demonstrated.

Problems discussed of particular relevance for developing countries are: 1) the use of supplementary face-to-face sessions, where the author pleads for rational decisions and warns against traditional approaches, 2) the application of proper two-way communication in writing, 3) the economy of a large-scale approach, 4) the media available and 5) the suitability of distance study for non-formal education.

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3.4.2 Discussion

In discussion a number of points were clarified. One particular question concerned recognition and acceptance of the programmes offered by an institution. Here it was suggested that there were different forms of recognition:

(i) by the State (in establishing an institution);
(ii) by academic colleagues and professional bodies;
(iii) by the students and their parents.

In this connection it is relevant to point to the promotion of distance education - one of the aspects of the Distance Education Programme for Africa, developed by ECA.

Acceptance of a distance education institution might depend upon recognition of the quality of its materials; on the success of the institution, particularly if an open admission policy operated; and on acceptance of the methods of distance teaching as valid and effective alternatives.

3.5 Address by Mr. G.W.S.V. Rumble, Open University of the United Kingdom: "Planning for Distance Education"

Mr. Rumble spoke around the hereunder printed paper, rather than to it.
He mentioned that there was diversing in the principles and practices of distance education:

1) in the goals and objectives which institutions were trying to attain;
2) in the methodologies and media-mix employed;
3) in the operationalizing of systems.

A first stage in planning, stated Mr. Rumble, was the definition of goals of the institution, relating these to needs. The U.K. Open University had initially concentrated on under-graduate studies, offering general degrees with the aim of widening opportunities for access to higher education. This strategy had ensured its academic respectability. More recently the Open University had entered the field of continuing education, and was providing courses aimed at community needs.

Mr. Rumble mentioned in this connection several examples of institutions in developing countries. The Alama Iqbal Open University in Pakistan, apart from its academic programmes, had courses aimed at the rural masses in, for example, chicken farming and vegetable growing. The Universidad Nacional Abierta of Venezuela concentrated on professional degree studies aimed at meeting the manpower needs of the nation, as defined in the fifth national plan.

Goals, however, are frequently stated in generalized terms. Planners and evaluators generally want goals to be concretized as objectives. Many persons, however, welcome vague objectives because success or failure cannot then be measured.

Mr. Rumble's view was that academic programmes need to be specified in detail in relation to each target group. The implecations of objectives need to be modelled, the models taking into account, the range of strategic choices that are available in, for example, the choice of media, the use of other agencies which might undertake particular tasks on behalf of the distance education institution (such as the production of broadcasts or the printing of texts).

The availability of resources (buildings, equipment, staff, and time) have to be considered. Trained staff may not be available in the first place, and once trained they might be lost because the institutions could not afford commercial salaries. This had occurred in Latin American ITV systems. The requisite skills may not be available in the country, and foreign agencies might have to be used.

Thus Costa Rica's Universidad Estatal a Distancia sent its textual materials to Spain to raise the texts on film.

"Time" too was mentioned a resource, not merely in the sense of design and production of materials but also in terms of the implementation of a project. Thus, projects could be initiated as pilot projects, and they might never proceed beyond that stage: or they could take an incremental approach, with gradual growth allowing for modification in the light of experience; or they could be established on a large scale from the start. This last option was favoured in high technology projects where early achievement of economies of scale were felt to be important.

In the evaluation of strategic choices, academic, operational and economic factors all played their part. None could be predominate. All are interrelated. Once decisions on strategy had been made, operational plans could be drawn up. These might cover project implementation, and here two key dates were important:

(i) the publication of the prospectus, which had to give basic information to students on course, methods of study, fees and so on;

(ii) the start of teaching, when not only had materials to be ready, but distribution systems functioning and the tutorial system (if used) ready to work.

A second type of operational plan was the course calendar, which specified when major events would occur in the student's study (e.g. examinations, submission dates for assignments, dates of broadcasts, etc.) but which might also suggest when particular materials might be studied. Discussion at the end of the address classified the "pacing" nature of such calendars. The intention was to guide the student as to the rate of progress he might need to follow if he was to relate broadcasts (if on open air transmission and hence transmitted at fixed times) to textual materials (assuming there was integration of media), and be adequately prepared for formal examinations. The course calendar, once established, would determine distribution and production schedules - themselves related to an assessment of production rates.

Once operational plans were established, they might be tested in a pilot project, or modelled. It is important that one of these two happens, if not both, in order to assess operational and economic capabilities. An important element of such models is student number forcasting. Thus in the Open University modelling of student numbers on higher level courses had led to a very significant revision of tutorial policy.

The economic features of distance education were well known, being characterized by high fixed costs and low variable costs, as compared with conventional systems. The higher the technology, the higher the fixed costs. However, the low variable costs per student meant that at a certain point the number of students would enable significant economies of scale to be effected. Particular economies of scale could be effected by television and radio. On the other hand, language laboratories, computer-based teaching, and films gave little or no economies of scale. Mr. Rumble pointed out that the choice of media depends in part on the geographical area to be covered, and in part on the audience size. Thus television is always too costly when catering for a small number of students. As a general rule the "little" media (using inexpensive equipment such as slide projectors, tape recorders, radio, etc.) offered greater advantage than the "big" media (television, computer instruction) when small audiences were concerned. As an example of orders of magnitude, generally speaking fixed costs were much higher for television than for radio (of the order of 10 : 1), but costs could however be modified if existing facilities were used at marginal cost.

In this connection it seems worthwhile to refer to comparative studies concerning the effective learning result in the use of television and radio. Generally speaking once can say that television is very attractive to the student, but on the other hand the learning results seem not to differ significantly. Therefore the question is important if - especially for poor countries - it is necessary to think about using the - as Mr. Rumble called it - "big media". But this subject also has come up in other discussions during the seminar.

In Mr. Rumble's opinion planners needed to consider not merely the cost of a project, but who would bear it. Some systems charged students for materials, as well as charging fees. The total direct costs to students, added to indirect costs (e.g. student travel) should not be so high as to discourage target population students from applying - otherwise the whole point of a project would be lost.

There is evidence, when direct comparison between conventional and distance teaching institutions has been made, that not only distance teaching (given sufficient student numbers) is a cheaper way of educating persons, but also as effective (that is, the learning gains of students in distance education projects can be as high as those in similar conventional projects). But the achievement of economies of scale was not necessarily the prime objective, though it was important in many projects. Distance teaching could, by widening access to education, accomplish tasks which conventional systems could not do, and in very many cases this was what was worthwhile.

3.5.1 Planning for distance education

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Summary

Planning and implementation of distance learning projects cannot be divorced from the unique context of a particular institution. However, while answers to particular problems may be very different, the approach to planning and the questions which planners need to ask themselves have a greater universality. This paper attempts to pose questions for African and Asian planners, rather than provide aswers transferred without further thought from the developed world.

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Planning for Distance Education

Characteristics of traditional education

Most organised formal education is carried out in classrooms or lecture-halls, with an individual teacher, in person, imparting knowledge and skills to a group of students or pupils. The education imparted by such traditional means can be excellent, but depends on the availability of funds to provide experienced and well-trained teachers at appropriate teacher : pupil ratios in appropriately equipped buildings. However, the large scale use of traditional solutions can pose problems, and indeed, for certain needs, may not be either the best or even a possible option. Distance learning is then an alternative path towards the solution of educational problems.

Characteristics of distance learning

What do we mean by distance learning, and what are its advantages? Kaye (1) characterises distance learning systems as having a combination of a relatively dispersed student population and a minimal reliance on face-to-face teaching (or a significant change in its role). These two principal characteristics are associated with one or more of the following features:

- concerning students: a degree of independence on the part of the learner as to the timing and location of study activities; and an enlargement of educational opportunities to groups previously unable to take advantage of traditional forms of education

- concerning learning materials and methods: a tendency to adopt a modular or credit structure within the curriculum; the use of a variety of media in combination with each other (print, TV, radio, face-to-face teaching); and the provision of learning materials designed for independent study, sometimes augmented by some face-to-face tuition in a role supporting the other media

- concerning logistics: centralization of production, with decentralization of learning.

- concerning economics: high initial start-up costs, but lower variable costs per student, giving the potential for significantly lower average costs per student provided the student population is big enough.

It is these features which make distance education an attractive alternative. Hakemulder (2) listed a number of situations in which distance education is an appropriate alternative to traditional means. The fact that learning is at a distance means that new target groups can be reached; distance education thus democratises education by reaching new groups who were previously inaccessible. The method stands outside particular educational objectives in the sense that it can be used at different educational levels (for example, for functional education, specialized training, or university level education). Because it is relatively time-free, in the sense that students can in many cases study when it suits them, it can meet the needs of those who are working, and thus provide access to life-long education. Finally, there are economic incentives for adopting distance teaching. The formal educational system is very expensive on manpower. It is argued that by using a centralized production facility to design and produce high quality distance learning materials for largely independent study by students, savings can be achieved. This argument must be treated with care. Design of high quality materials suitable for independant study is more expensive in terms of staff time per hour of student learning time than is the case with conventional face-to-face teaching. Also, the initial cost of production and distribution or transmission facilities can be very high, and certainly much higher than is the case for traditional systems. However, the variable teaching cost is almost always lower given the reduction in emphasis on face-to-face teaching in almost all systems, so that economies of scale are potentially achievable provided that the target population is big enough.

These kinds of major considerations lie behind decisions, usually taken at governmental level, to establish distance teaching institutions. Kaye (1) discusses the use of distance teaching in ACP countries and identifies four major categories of aims and target groups. The first is functional education often aimed at dispersed rural populations - as in Niger and Senegal through radio clubs. The second is at secondary school level, as in Mauritius (College of the Air). The third is in in-service teacher training, as in the Ivory Coast (through the newspaper Fraternité Matin) and in Kenya (University of Nairobi Correspondence Courses Unit). And the fourth is at university level as in Nigeria (Correspondence and Open Studies Unit of the University of Lagos).

Characteristics of the target population

The decision to establish a system is, however, merely the first step in the process. At this stage, the principle characteristics of the target population and the curriculum may be defined, but a great deal remains to be done at the strategic planning level.

The secondary characteristics of the target population, their lifestyles and the infrastructure within which they live will affect media choice and the nature of the academic programmes to be offered. Although not a complete check-list, and although all the factors listed are not appropriate to all circumstances, table 1 gives an idea of the factors which planners may need to consider at this point.

Table 1

Characteristics of the Target Population

1. **Course/Training Programme Data**
   - occupations of students
   - entry characteristics (educational background, relevant work experience)
   - training/educational needs (knowledge, skills, attitudes)
   - motivation to follow courses
   - previous study habits

2. **Demographic Data**
   - numbers of students (over time)
   - age, sex
   - geographical distribution
   - language(s)

3. **Life-Style**
   - working hours (hence time available for study)
   - housing conditions
   - economic levels
   - non-work activities

4. **Infrastructure**
   - postal services
   - TV/radio reception and transmission facilities
   - transport (road/air/rail)
   - libraries and other community facilities
   - main house services (water, electricity etc)

Curriculum, programmes of study and courses

The factors determining what an institution teaches do not all bear directly on the needs of the students. The designation of an institution as, for example, an open secondary school or a university, immediately defines curriculum and programmes of study in terms of preconceived ideas of what a 'secondary school' or a 'university' should be like. It also brings to the fore the need for comparability with and credibility in the eyes of similar institutions. This may affect the ability of the institution to be innovative: innovation may be acceptable only in so far as the respect of colleagues in similar institutions is not lost. But other factors too will be of importance. At university level the need for approval from academic colleagues may dictate a 'need' to teach prestigious high level courses. The expertise of individual members of staff may shape the content of a programme of studies. State requirements, or the need of professional bodies, may determine what is included in the curriculum. And finally, there are the needs of students.

If these factors influence curriculum and the content of programmes of study leading to particular qualifications, then other factors will determine the structure of the programme. Most distance learning systems have adopted a modular structure to their programmes of study, in which students take a number of courses each of which cover a body of knowledge which has some coherence. The courses are normally taught over a period of time (a term or a year) and are followed by an identifiable body of students. Courses may be oompulsory for all students registered for a particular qualification, or optional.

Planners working in distance learning systems need to be aware of the constraints which determine the structure of the courses. Some of these constraints are academic in nature. Study of a particular subject may be held to be justified only after a certain number of hours study. But, for most systems, it is just as important for students to progress through the system in accordance with a timetable which registers them on courses at the same time, defines the time of broadcasts and of mid-term evaluatio and examines the student on a particular date at the end of the course. This leads to the definition of teaching periods, which break-up the academic year into a number of terms (usually 2,3 or 4 per year). In a distance teaching system the interval between each term is used for administrative purposes; for example, the students final examination is marked, his overall evaluation grade determined, his re-registration on another course accomplished, his appointment to a course tutor undertaken and the materials he needs to study on his next course are despatched to him. The critical path for these activities is as important a factor in determining the structure of the academic year as are academic considerations.

A further consideration will be the time which students can devote to thei studies. If we assume that students are working, then the number of hours available for study may be severly limited. Table 2 shows a very crude calculation:

Table 2

	Hours/Day	Days/Week			
	24	x 7	=		168 hours in a week
Less	10	x 5	=	50	working and unusable travel-time
	10	x 7	=	70	sleeping and meals
Sub Total					120 hours
Balance available for all other commitments					48 hours

Most students working in the British Open University take only one full-credit course per year, implying 10 to 12 hours work per week over a 32 week teaching period, and no student is allowed to do more than two credits per year (20 to 24 hours work per week).

The basic variables thus become:

- the number of hours study deemed necessary to gain a defined qualification (say 4000 for a university firt degree)
- the number of hours a student can reasonably be expected to study in the system (say 10 to 14 per week)
- in a fixed year model, the number of weeks of study which can be accommodated within the academic year (probably no more than 34 out of 52, given critical path activities between teaching periods together with public holidays). Note that a fixed year model is not the only option available
- the minimum acceptable work load per week per subject or course (say 5 to 7 hours per week).

Table 3
Media Choice Print

Print will probably form the main pedagogical medium in any DLS Types of Print Material

- specially written correspondence texts or lessons
- specially written text books
- text books and other items already published elsewhere
- library resources, through directed reading
- supplementary items of various types:
    - supplements to course texts
    - reading lists
    - assignments
    - supplements to other media (eg. broadcast notes)

1. Pedagogical Functions of Print
    - imparting facts
    - developing skills
    - illustrating how knowledge can be organised for teaching and learning purposes
    - linking students with tutors
    - updating material in light of recent research

2. Motivational Functions
    - student can work at his own pace
    - reinforcement via self assessment questions
    - reinforcement via submission of assignments to tutors and written feed-back
    - leaves a permanent record for revision
    - carries academic respectability

3. Demands on Students
    - fairly high level of literacy skills
    - motivation for and/or previous experience of independent study of text materials
    - a suitable environment for independent study

4. Flexibility and Costs
    - can generally be provided at a lower cost and in a more flexible manner than the other media.
    - is prepared away from students well in advance of its use and must be suitable for all students in the target population
    - supplementary material can be prepared in response to tutor and student feedback

5. Production and Distribution of Print Materials
    - creation of suitable written material requires special skills (this has staffing implications, especially with respect to external consultants)
    - production of print material requires access to technical staff and equipment for: editing, design, illustration, printing, storage
    - optimal procedures for physical distribution of print materials need to be investigated (post; bulk delivery; buses; use of existing newspapers and other informal means).

Table 4

MEDIA CHOICE: AUDIO-VISUAL MEDIA

Audio-visual media can, in principle, be used to carry a main expository role in a DLS, but organisational and cost factors generily rule this out. The main role is usually to supplement print in special areas.

Types of Audio-visual Media

- slides, filmstrips, film loops, and film
- audio-tape or discs and filmstrips, diagrams, or pictures
- radio and TV broadcasts for "live" use or for local recording for later re-use

1. Pedagogical Functions

   Audio (eg. Radio)

   - to convey primary source material (eg. drama, music)
   - in teaching language skills (pronunciation, conversation)
   - to provide rapid feedback on student work
   - to provide 'tutorials' on areas of conceptual difficulty

   Audio-visual (eg. TV, Film)

   - to demonstrate experiments
   - to convey primary source material (eg. child behaviour, biological phenomena, music, drama)
   - to illustrate working components (eg. internal combustion engine)
   - to illustrate principles involving dynamic change (use of animation, slow motion, speeded-up film)

2. Motivational Functions

   - to complement printed materals and deepen understanding of the course
   - to give feeling of identity with staff, other students and central institution to dispersed students
   - to act as a stimulus for group work (via viewing or listening groups)

3. Demands on students

   - less convenient for students than print (fixed broadcast times; need to go to a local centre if no TV/Radio receiver at home or if tape-slide or film projection used)
   - transient nature of audio-visual media. Students need to be given adequate preparation and follow up activities if a.v. material is to be integrated into course

4. Flexibility and Costs

   - less flexible than print unless there are adequate resources and open-air broadcasting
   - production costs much lower for radio than TV (on average radio production cost ¼ of TV production - also requires fewer specialist technical staff)

Table 5

MEDIA CHOICE: INTER-PERSONAL ACTIVITIES

Inter-personal activities are an essential component of a DLS pedagogically, for assessment purpose, and for maintaining students motivation.

Types of Inter-personal Activity

(a) Remote

- correspondence tuition and assessment of students' work by tutors
- tutor-student telephone communication
- student to student communication by writing and telephone

(b) Direct

- local tutorial classes, seminars, lectures by tutors
- contacts with local people with relevant knowledge/skills
- attendance at short residential courses
- student self-help and discussion groups
- counselling sessions (course choice, vocational guidance)

1. Pedagogical Functions

- to grade students' assignments (correspondence teaching)
- to comment on the content and organisation of assignments (correspondence teaching)
- to interpret course material to students (face-to-face teaching)
- to provide remedial help (face-to-face teaching)
- to provide guidance on study methods (counselling)
- to allow different perspectives to bear on the course (study group activities)

2. Motivational Functions

- to personalize a distance teaching system
- to consider individual response to course material
- to pace students' work
- to gain feedback on attainment via grading of assignments
- to provide local supportive agencies to help with learning difficulties, personal circumstances affecting study, job implications

3. Demands on Students

- submission of regular assignments to correspondence tutors makes heavy demands on students' time
- provision of tutorial, counselling and study group activities involves student in travelling
- provision of fixed tutorials reduces flexibility for student in study time planning

(Continued)

4. Flexibility and Costs

- provision of local tuition and counselling will raise unit costs
- low course enrolments will necessitate wide tutorial catchment area and reduce flexibility of local tutorial provision (or increase costs)
- alternatives to face-to-face teaching (eg. telephone tutorials) have resource implications
- tutorial, counselling and study group activities need to be carefully integrated into the other available media to be of optimal value: implications for organisation of students' activities and for course creation and production activities

5. Production and Distribution

- need to investigate the availability on a local basis of tutorial and counselling personnel (staff from other universities, colleges, schools, other institutions and agencies)
- need to brief, train and monitor part-time staff
- need to hire tutorial accommodation
- need for a regional office to organize and co-ordinate local support services for students
- need to devise systems for the flow of assignments between students, tutors and the university
- need to make special provision for disadvantaged and/or disabled students
- need to decide on balance between central and regional involvement in student-based activities.

[illegible] functions of the media relative to curriculum and content, its activation function in the total learning package, the demands which it makes on the students, its flexibility as a medium, its cost, and production and distribution constraints. Tables 3 to 5 (3) analyse some of these factors for three media - print, audio-visual media and inter-personal activities.

Each medium has advantages and disadvantages. There is no standard and no ideal combination. However, studies of different distance learning systems do suggest that there are benefits in integration of the media (4). Indeed, where media are not integrated, and particularly where face-to-face tuition sets out to be an alternative rather than a support to the other media, positive disadvantages may arise. However, there is evidence that some media may be more appropriate to particular cultural backgrounds than others. Thus Sine (5) has suggested that radio is particularly appropriate to many African cultures, with their emphasis on the oral tradition.

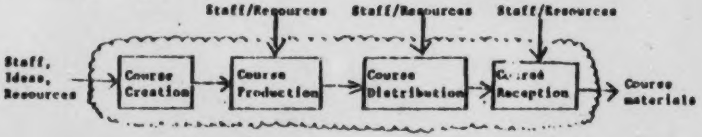
The organisational structure

The characteristics of the organisation, as defined by target population, curriculum and course structure, and media choice, will tend to dictate the organisational structure of a distance teaching system. Broadly speaking, distance teaching systems can be thought of in terms of a number of integrated sub-systems and sub-subsystems. The major subsystems are those concerned with:

- the design, production, distribution and reception of courses
- the admission, registration on course(s), allocation to local support services (local centre, tutor, counsellor, etc). assessment, examination and certification of students
- decision-making (higher management functions) and control
- logistical support sub-systems (eg. buildings maintenance, purchasing, recruitment, etc).

These subsystems are represented diagrammatically in Figures 1 to 3. Different institutions will vary in the complexity of the tasks which face them. In part this will reflect media choice. While course design is, or ought to be, an integrated activity, different production, distribution and reception sub-subsystems will exist for each media.

Figure 1 : COURSE OPERATING SUB-SYSTEM



Broadly speaking, however, these functional systems are reflected in a tripartite organisational structure which frequently takes a form similar to that indicated in Figure 4.

One of the major decisions to be taken must be the degree to which an institution makes use of facilities already available in the country and provided by other agencies. Although arguments derived from the need to control the means of production and distribution may favour the establishment of an integrated and wholly independent system, constraints and opportunities may dictate reliance on other institutions. Lack of available technical expertise and cost advantage may dictate the use of state or commercial production agencies (eg. printers, broadcasting); existence of an efficient national postal service may make it unnecessary to distribute ones own materials; and cost may argue for the use of existing broadcast transmission networks, as opposed to the establishment of a new channel or the use of alternative audio and vidio-cassette technologies. At the same time, any arrangements entered into with independent agencies must safeguard the distance learning system by ensuring that production and distribution will meet the teaching schedules set by the system.

The other major problem is to devise suitable decision-making and control structures in order to ensure integration across functional areas. Design, production, distribution, teaching and administration of the learning process cannot be divorced from each other.

Matrix organisational structures offer a solution here, with decision-making and control being vested either in project teams with defined short-term life or in permanent committees that manage cross-functional processes within the institution. Figure 5 indicates requirements in general terms. Where this cross-functional integration is not attempted, experience suggests that considerable problems arise.

Figure 2 : STUDENT OPERATING SUB-SYSTEM

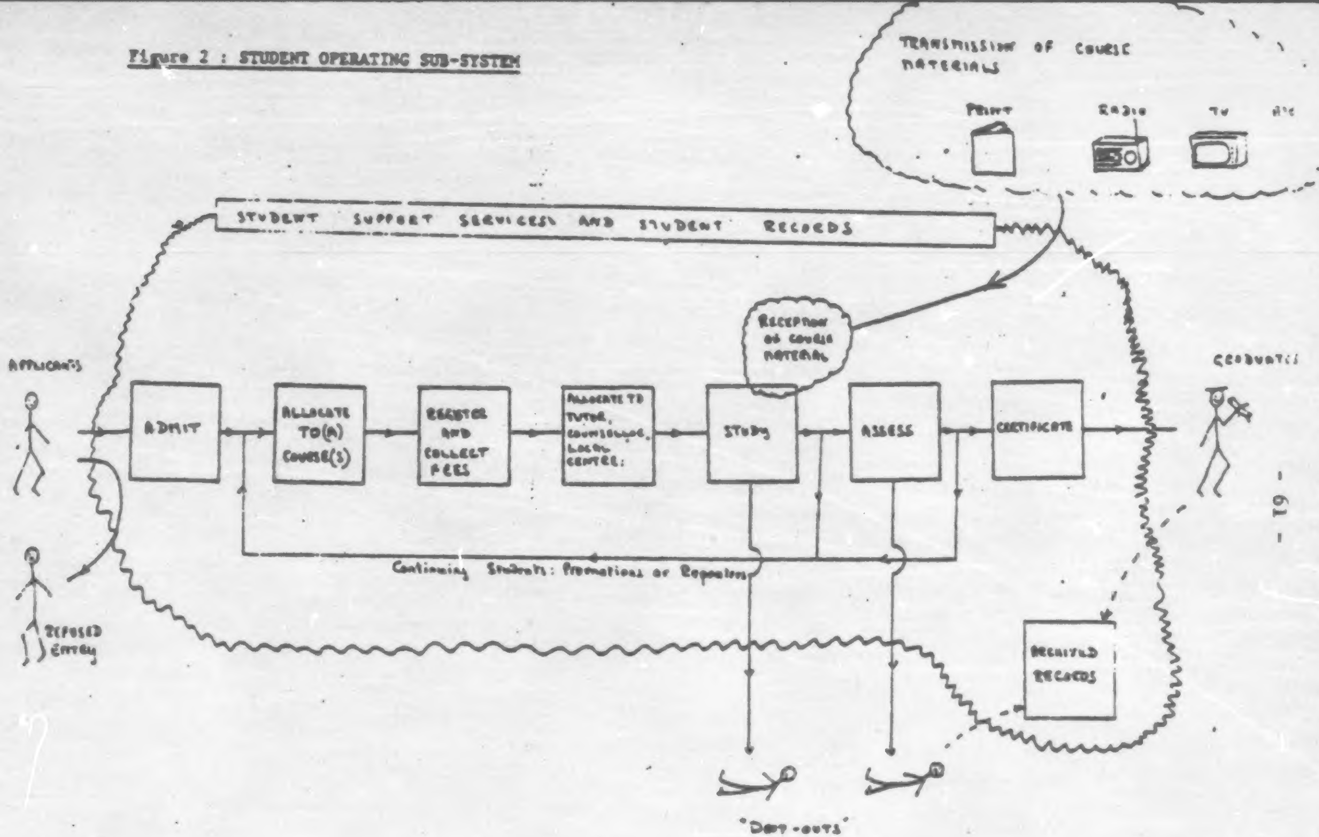

TRANSMISSION OF COURSE MATERIALS
PRINT
RADIO
TV
H/C
STUDENT SUPPORT SERVICES AND STUDENT RECORDS
RECEPTION OF COURSE MATERIAL
APPLICANTS
ADMIT
ALLOCATE TO(A) COURSE(S)
REGISTER AND COLLECT FEES
ALLOCATE TO TUTOR, COUNSELLOR, LOCAL CENTRE:
STUDY
ASSESS
CERTIFICATE
GRADUATES
Continuing Students: Promotions or Repeaters
REFUSED ENTRY
ARCHIVED RECORDS
"DROP-OUTS"

Figure 3 : SYSTEMS-VEIWS OF A DLS

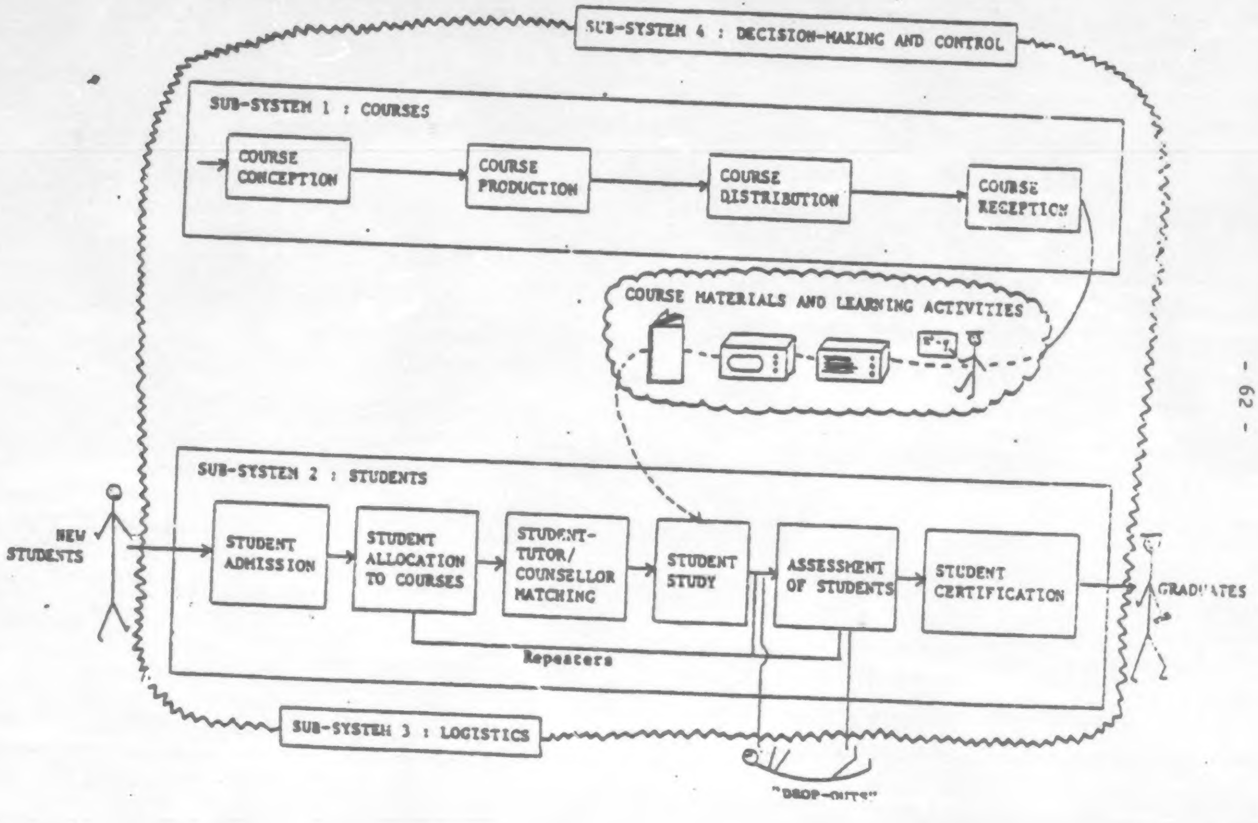

SUB-SYSTEM 4 : DECISION-MAKING AND CONTROL
SUB-SYSTEM 1 : COURSES
COURSE CONCEPTION
COURSE PRODUCTION
COURSE DISTRIBUTION
COURSE RECEPTION
COURSE MATERIALS AND LEARNING ACTIVITIES
SUB-SYSTEM 2 : STUDENTS
NEW STUDENTS
STUDENT ADMISSION
STUDENT ALLOCATION TO COURSES
STUDENT-TUTOR/ COUNSELLOR MATCHING
STUDENT STUDY
ASSESSMENT OF STUDENTS
STUDENT CERTIFICATION
GRADUATES
Repeaters
SUB-SYSTEM 3 : LOGISTICS
"DROP-OUTS"

Figure 4: Characteristic Organisational Structure of a Distance Learning System

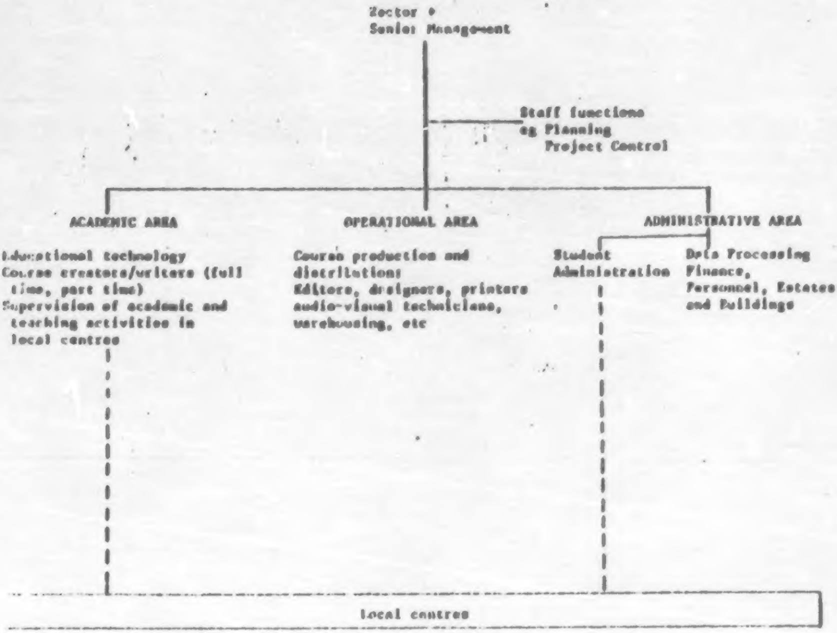
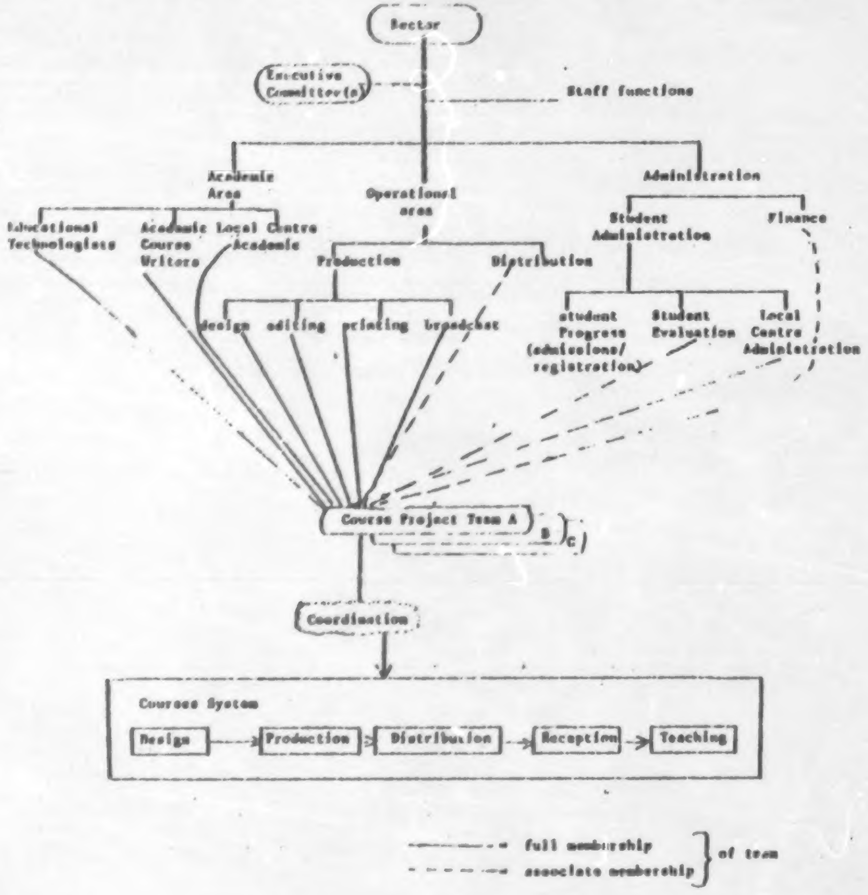

Rector +
Senior Management
Staff functions
eg Planning
Project Control
ACADEMIC AREA
Educational technology
Course creators/writers (full time, part time)
Supervision of academic and teaching activities in local centres
OPERATIONAL AREA
Course production and distribution:
Editors, designers, printers
audio-visual technicians,
warehousing, etc
ADMINISTRATIVE AREA
Student Administration
Data Processing
Finance,
Personnel, Estates and Buildings
local centres

Figure 5: INTEGRATION OF COURSE-FUNTIONAL PROCESSES - COURSES SUB-SYSTEM: A POSSIBLE MODEL


Rector
Executive Committee(s)
Staff functions
Academic Area
Operational area
Administration
Educational Technologists
Academic Course Writers
Local Centre Academic
Production
Distribution
Student Administration
Finance
design
editing
printing
broadcast
student Progress (admissions/ registration)
Student Evaluation
Local Centre Administration
Course Project Team A
B
C
Coordination
Courses System
Design
Production
Distribution
Reception
Teaching
full membership
associate membership
of team

Rate of development

The rate at which a particular system develops during its early years will depend upon many factors, including

- political pressures, particularly towards the early achievement of the objectives specified by government,
- resource availability, including physical, human, and financial
- time and the critical path required to develop an institution
- economies of scale

There are arguments in favour of a moderate rate of development. Moderate growth allows time for reflection and experiment; pressures are not so great; and in absolute terms the cost may be less than for a big project. On the other hand, distance learning systems are particularly well suited to education on a large scale; economies of scale are more easily achieved given larged student intakes; and the political payback from a big project may be more attractive than for small ones.

Project implementation

Once decisions on the target population, curriculum, media and rate of development have been taken, the project can be implemented. The essential features of this stage are shown in Figure 6. The figure indicates the basic logic which must underlie the initial planning of an institution. It does not attempt to provide the time dimension, which will be determined by local conditions. However, two key dates will need to be given prominence in all planning schedules:

- the start of the first teaching period, which may be determined by political considerations. This implies that course materials be ready, which in turn implies that creation, production, distribution and reception mechanisms across all media to be used initially are agreed and established (including storage). To do this, buildings and equipment must be operational, supplies available and distributed, and human resources in post and ready to work; students admitted, registered, and allocated to courses (implications for student administrative systems); the student assessment system ready to work; and the tutorial system activated (allocation of students to tutors);
- the date at which the institution announces its programme(s) to potential students (eg. by publishing its first prospectus). The accual date for decision will be earlier (when final copy has to be ready). This implies informing students about the programmes on offer, the media to be used, how to apply and register, fee policy, etc.

Resource needs

Planning for project implementation will need to take place against an analysis of the particular sub-subsystems and their resource needs, including buildings, equipment, consumables, services, human resources, and information - all of which will need to be translated into financial requirements.

The general economic characteristics of distance learning systems are well understood and documented (6). Broadly speaking, economic analyses of distance learning systems distinguish between the fixed costs of the system and the variable costs per student. The fixed costs of distance learning systems, arising from investment in course design, production and distribution, are higher than is the case for traditional educational systems, and much higher in those systems which use television or video cassettes. On the other hand, the variable costs per student are much lower, so that at a certain point the average cost per student in the distance teaching system begins to fall below that of conventional systems. Figure 7 illustrates that general cost functions for distance learning and conventional systems, where:

F_1 is the fixed cost of a distance learning system
F_2 is the fixed cost of campus-based universities
V_1 is the variable cost per student in a distance learning system
V_2 is the variable cost per student in campus-based university
S is the breakeven point, found by applying the formula

$$S = \frac{F_1 - F_2}{V2 - V1}$$

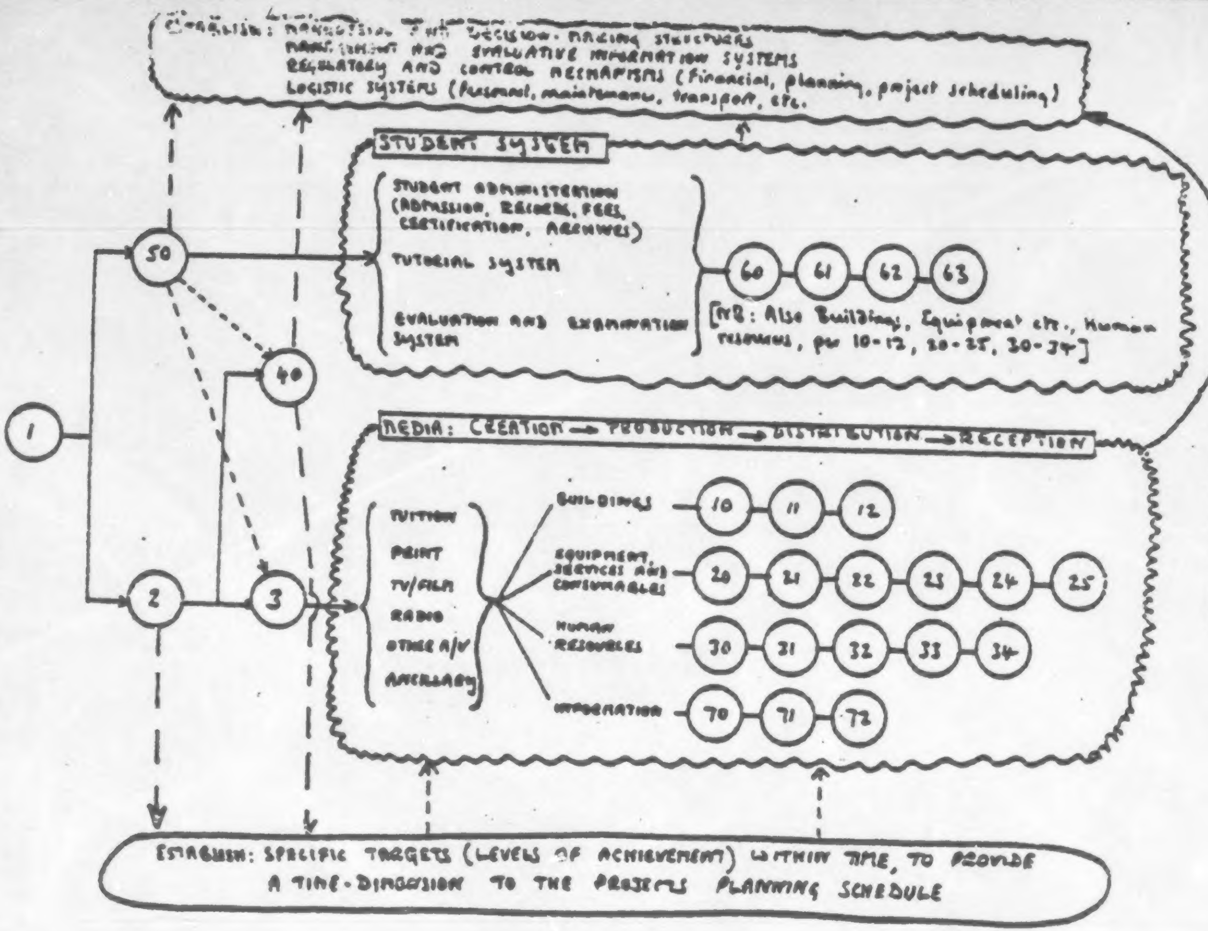

ESTABLISH: MANAGERIAL AND DECISION-MAKING STRUCTURES
MANAGEMENT AND EVALUATIVE INFORMATION SYSTEMS
REGULATORY AND CONTROL MECHANISMS (Financial, planning, project scheduling)
LOGISTIC SYSTEMS (Personnel, maintenance, transport, etc.
STUDENT SYSTEM
STUDENT ADMINISTRATION (ADMISSION, RECORDS, FEES, CERTIFICATION, ARCHIVES)
TUTORIAL SYSTEM
EVALUATION AND EXAMINATION SYSTEM
60
61
62
63
[NB: Also Buildings, Equipment etc., Human resources, per 10-12, 20-25, 30-34]
1
50
40
2
3
MEDIA: CREATION → PRODUCTION → DISTRIBUTION → RECEPTION
TUITION
PRINT
TV/FILM
RADIO
OTHER A/V
ANCILLARY
BUILDINGS
10
11
12
EQUIPMENT, SERVICES AND CONSUMABLES
20
21
22
23
24
25
HUMAN RESOURCES
30
31
32
33
34
INFORMATION
70
71
72
ESTABLISH: SPECIFIC TARGETS (LEVELS OF ACHIEVEMENT) WITHIN TIME, TO PROVIDE A TIME-DIMENSION TO THE PROJECT'S PLANNING SCHEDULE

Figure 6
PROJECT IMPLEMENTATION

Keys to Tasks in Figure 6

1. Specify and agree the aims (ends or objectives) of the institution
2. Identify academic programmes and courses to be taught
3. Identify choice of media

10. Identification of buildings required
11. Acquisition of building(s)
12. Occupation of building(s)

20. Identification of needs for equipment, services, consumables
21. Identification of suppliers
22. Negotiation with potential suppliers
23. agreement with suppliers
24. Receipt and storage of supplies, or installation of equipment
25. Despatch of goods to students etc.

30. Identify tasks to be done
31. Specify staffing needs (categories of staff, skill levels, etc)
32. Decide on staff levels (by category, skill levels, etc)
33. Recruit staff
34. Induct/train staff

40. Define the structure of the academic year

50. Identification of target population

60. Agree policy in outline
61. Agree policy in detail
62. Design system(s)
63. Implement system(s)

70. Define information needs
71. Develop information system
72. Implement information system

for the intersection of two lines such as in Figure 7, at which a distance learning system has a unit cost equal to or lower than (as one moves to the right of the graph) the campus-based universities. (For Figure 7, F_1 has been put at 3 x F_2 and V_2 at 3 x V_1 purely for illustrative purposes.)

Potentially economies of scale can be achieved. As the number of students N rises, so the average cost AC declines by spreading the fixed cost F over more units until, when N is very large, the average cost is close to the variable cost V in the Cost function

$$AC = F/N + V$$

Plotted on a graph, the result is a rectangular hyperbole (see Figure 8, taken from reference 7).

This shows that for very small number of students, conventional teaching methods are likely to be more cost-efficient, but for higher numbers distance learning systems are the more efficient. This has implications for the curriculum and the development of academic programmes. The investment of resources in course design (where the courses are designed only for teaching at a distance), and the cost of establishing production and transmission systems can only be justified (on grounds of cost-effectiveness) if there are going to be sufficient students to bring average costs down. At the higher education level, where student numbers tend to be smaller in any case, the results for the development of academic programmes would seem to be the following:

- the distance learning system restricts its academic programme to areas where there is known to be a significant level of demand (eg. teacher training)
- the development of courses in a wide number of subject areas, but with a severely restricted course choice in each area, foregoing the possibility of turning out professionally trained graduates (eg. graduates with a single subject honours degree),
- ignoring unit costs and embarking upon a programme for social or political reasons (eg. reaching previously deprived target populations).

These remarks apply particularly to higher education institutions that set out to develop programmes wholly aimed at students learning at a distance. It is possible to reproduce lecture notes or film or video-tape the lectures given to traditional on-campus students, for subsequent use by extramural students, at very little additional cost. In such cases the extramural students in effect follow the same courses as their on-campus colleagues, meetings tutors at local centres, and doing the same assignments as their fellow students. The cost of such schemes, in absolute terms, may not be very high. Wagner (8) writing about SURGE (State University Resources for Graduate Education at Colorado State University) discussed the use of video-tape to provide off-campus education at industrial locations near the University. SURGE's students receive the same class materials, assignments and examinations as their on-campus colleagues. They can normally view the video-taped lecture within 48 hours of its original delivery, and during the viewing at a local centre, they can normally telephone queries to a graduate student who is on call at the University. Participating organisations - normally industrial firms, provide class-room facilities and equipment. Additional costs arise in the provision of studio-classroom equipment and consoles, the central recording area, the tapes and their distribution, the services of the graduate instructors, the costs of local centres, and administrative costs. Wagner's study indicated that the costs per student contact-hour were very low (about US$3.60 at 1972 prices) and that further economies of scale were realisable

In contrast we can look at a system which does create its own courses - the British Open University. One of Wagner's studies of the British Open University (9) discussed the cost advantages of the University in comparison with conventional British universities, and concluded that its cost advantages arose from its use of a system which had high initial costs and low variable costs, a large number of students enrolled on its courses, and a limitation of student course choice. Wagner's findings in this respect are similar to those of Laidlaw and Layard (10) who commented that the development of higher level courses with smaller student numbers at the Open University would have to be justified on the ground that they are an integral part of a system providing wider access to complete degree courses rather than on the ground that they are a cheap way of doing this'.

Although the general economic characteristics of distance learning systems are well understood, little work has been done in the development of approaches to rational cost budgetting for application to distance learning systems. However, Neil, Rumble and Tout (7) have begun to develop generalized quantitative models related to the inputs and outputs of distance learning systems, which models can be expressed in monetary terms.

FIGURE 7

$$\boxed{TC = F + VN}$$

$F_1 = 3F_2$

$3V_1 = V_2$

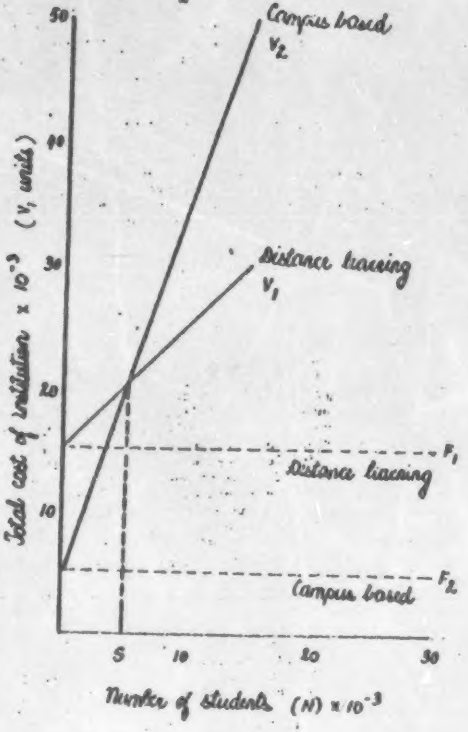
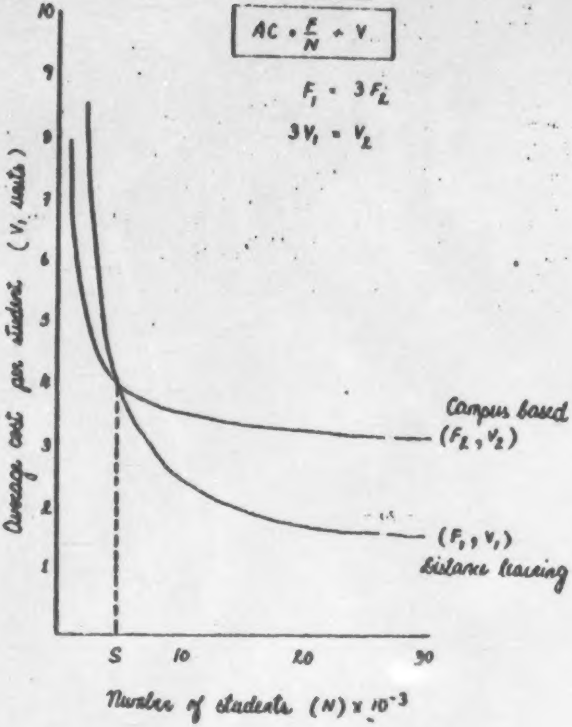


FIGURE 8



$$AC = \frac{F}{N} + V$$

$$F_1 = 3F_2$$

$$3V_1 = V_2$$

General conclusions

Of course it is not as simple as this paper makes it sound. Early decisions on target population, course provision and media choice affect the complexity of the organisation, and its cost. Moreover, as the number of courses on offer and the number of students rises, so do the problems. Professionally run warehousing becomes a necessity. Student records increase in number and complexity, particularly if there are complicated course and progress regulations. The need to renew and maintain courses places pressure on the central organisation. The scheduling of radio and/or television programmes, if broadcasts are on more than on channel, and of examinations, may become more complex if students have a very wide choice of courses. Compromises will have to be made on many issues where academic, operational, and financial factors are all of importance. Previous decisions will constrain choice for the future, so that change and innovation become progressively harder to achieve. It is the task of the professional planners within the institution to minimize uncertainties and to model the implications of various alternative policy options in terms of resource requirements and operating characteristics.

The planning and implementation of a distance learning system cannot be divorced from the unique context of the particular institution within which it takes place. However, the stages from normative planning (definition of major aims or objectives of the organization in terms of target populations and curriculum and academic programme design), through strategic planning (choice of media and development of appropriate organisational structures) to operational planning (project implementation schedule and deployment of necessary resources) are common to all projects. The factors discussed in this paper, together with the referenced reading, are intended as guides to action by planners and decision makers who are thinking about or in the process of establishing distance learning systems. They are not, however, palliatives for the instant and unthinking transfer to technologies which have been proved successful in other countries and other contexts. To copy systems, however tried and tested they may be in their original contexts, is a recipe for disaster. This does not mean that we cannot learn from others' experience, but that the solutions appropriate to each country and context will be unique - though the questions asked of planners and decision-makers may be the same the world-over. It is with the questions, rather than the answers, that this paper has been concerned.

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(9) Wagner, Leslie (1976), 'Economic implications of the Open University', a paper prepared for the OECD, Institutional Management in High Education, Third General Conference, Paris, 1976.

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3.5.2 Discussion

In the discussion the relative costs of comparable systems was considered. It was possible (as at the State University of Colorado) to film lectures and distribute these, with support materials, to distance students at very little additional cost. Similarly, lecture notes could be distributed as was the case in India, at very little cost. However, before comparisons could be fully drawn, some consideration needed to be taken of the suitability of such materials for distance, independent study; and arising from this, of their relative efficiency as measured in terms of drop-out rates.

3.6 European Panel

The first panel to open discussions in plenary session was an all-European group of experts and consultants, guided by an African Chairman:

Moderator : Dr. M.M. Kaunda (Zambia)
Members :-Prof. Dr. B. Holmberg, Distance University Federal Republic of Germany,
-Mr. T. Rekkedal, N.K.I. Skolen, Norway
-Mr. G.W. Rumble, Open University, United Kingdom
-Mr. R. Twite, British Council, London, United Kingdom

3.6.1 Discussion

The Panel opened by asking delegates what the relevance of European experience was to the African and Asian contexts. The application of sophisticated or high cost techniques, or of open-ended study, might be deemed to be inappropriate, whereas European experience of some aspects of administration, of the creation of scripts, and in some other specific technical areas might be felt to be appropriate. It was suggested that areas which needed consideration were the exchange of course materials and the training and exchange of personnel on a continental or inter-continental basis.

It was stated that a major need was for distance education to be relevant to the needs of the society. Because of the difference in societies it was clear that also the needs could differ tremendously. Questions concerning the applicability of materials from other contexts on advice of technical advisers, were raised. There was consensus that developing countries needed to define their own needs and try to seek their own solutions to problems. It might be in some cases inappropriate, for example for developing countries, to embark on formal education programmes such as those existing in the industrialized world. At the same time, the experience of industrialized countries, and even the technologies used, might be either instructive or capable of adaptation to meet identified needs in developing countries. Hence, some of the most successful applications of radio had occured in developing countries in Africa and Latin America. Television could be a powerful medium for educational resources. Spare transmission capacity on television and radio channels ought to be made use of - for when this occurs it would be at marginal cost. African countries need to consider such possibilities.

Given that there was need for an exchange of experiences, the role of panels within the present conference was discussed. This discussion in the present panel had concentrated on the applicability of techniques in the industrialized world to the African-Asian context. However, the need was for information on systems in the industrialized countries, so that African and Asian educators and planners could draw their own conclusions.

Discussion then centered on a number of topics. Amongst many observations made, the inapplicability of experience of distance education based on texts to literacy campaigns was noted; the degree to which comparisons of cost-effectiveness related to output of graduates was questioned, where there might be valid learning gains for drop-outs who had not formally graduated; the need for distance education materials to evoke a response in students and not to put them off study by being over-serious was raised. The use of study guides to existing materials, as against self-contained courses was raised and felt to be appropriate to higher education, were student's critical faculties needed to be developed. On the other hand, self-contained courses had advantages in situations were textbooks were in short supply or expensive. There was shared experience in a number of systems of the higher costs of teaching science and technology over art subjects. This problem will be taken care for in some other presentations.

3.7 Address by Professor Bakhshish Singh, Punjabi University, India

Professor Singh, in his capacity as President of the International Council for Correspondence Education, expressed the good wishes of the ICCE and of the Universities of Correspondence Education in India to the delegates of the present conference. He expressed the hope that his address would further the interchange of experience and ideas.

3.7.1 Distant Education in Developing Countries - with special reference to India

Some observations on Distant Education in Developing countries

Distant education is of particular relevance to developing countries in Asia and Africa as it provides an economically viable and academically sound alternative channel of imparting education at all levels. There was a time when the traditional method of imparting education in the class room could meet the public demand in these countries as higher education then was the monopoly of the elite and the prosperous sections of society. However, with the passage of time and awakening among the masses and their urge for democratisation, the conventional educational institutions could not satisfy the aspirations of thousands of new learners in the third world. This posed a serious problem for the governments in the developing countries because they could not possibly ignore the legitimate demand of the people for educational facilities; at the same time they could not afford to go on opening more and more educational institutions to meet that demand. The only way out of this dilemma for these countries was to find some alternative system which could provide education to the constantly rising number of new learners without putting much strain on their limited resources and at the same time without diluting the academic standards. It was felt that the alternative system should be such as may, in addition to extending educational facilities, help in equalising educational opportunities for all sections of society and be within their easy reach.

The policy-makers, planners, administrators and educationists in most of these countries engaged themselves in serious thinking and consultations among themselves and with expertise from other countries. Distant education which has been in vogue in a number of developed countries of the world for a long time attracted the attention of the policy-makers and educationists in most of the developing countries. It was felt that Distant education could be the most suitable alternative to the traditional system of imparting education. Of course no model from another country could be adopted in toto. Some variations and modifications had to be made to suit the peculiar conditions in each country. However, basically the Distant education method is more or less the same all over.

As is usual with every new system, Distant education in most of the developing countries had some teething troubles, and in some countries these troubles are still there. Most of these troubles were caused by resistance from the traditionalists in the universitie partly due to their inborn urge to cling to the traditional system and partly due to the want of proper awareness of the innovative system of Distant education. Lack of conviction and boldness on the part of policy-makers and educational administrators also stood in the way of development of Distant education. Consequently in some of the developing countries the Distant education system has been developed only as an extension of the traditional courses. However, some countries have tried to tap the potentialities of Distant education in providing interdisciplinary, vocational and job-oriented courses. This is a meaningful direction which needs serious thought as it could help in making education relevant to the needs of our societies.

But I am afraid so long as Distant education is under the control of traditional universities or institutions there would not be much scope for the proper development of Distant education. We must, therefore, think of Distant education universities on the lines of Open Universities or autonomous National Institutes of Distant education so that this innovative system may be developed on liberal and progressive lines. If Distant education is made subservient to the conventional universities then it will remain a poor relation of the traditional system of education and not grow beyond that. If this sort of situation is allowed to develop, then the very purpose of adopting an innovative system of education will be defeated except that we would have discovered an economical method of imparting the traditional education. It would be impossible for the Distant education system to break any new ground and to give a purposeful direction to our education. This aspect must, therefore, engage our greatest attention in thinking of any organisational pattern for Distant education. I am sure this International Seminar will give due consideration to this problem and come up with concrete recommendations to ensure unhindere and healthy growth of a meaningful innovation in education which Distant education can undoubtedly prove to be.

The Indian Experience

Since one of the objectives of this Seminar is to make a comparative analysis of experiences in Distant education in Africa, Asia and Europe, I would like to give a resume of Indian experience in the field:

The need

The pre-independence educational system in our country was designed to serve a relatively small proportion of the population. When we became independent there was naturally an unprecedented increase in the demand for higher education. Although a large number of new schools, colleges and universities were added, they still could not cope with the rising spiral of new learners. Our limited resources and priority for compulsory schooling target did not permit reckless opening of more colleges and universities. At the same time, with our commitment to the socialistic pattern of society we could not possibly deny equal opportunities of education to all the sections of society. We had, therefore, to think of non-formal systems of imparting higher education, and that is how correspondence courses came to be instituted in some of our universities.

Expansion

Beginning with Delhi University in 1962 and Punjabi University, Patiala in 1968, there are now 24 universities offering Correspondence Courses. Four Regional Colleges of Education also offer a Correspondence Course for the B.Ed. degree. The Central Institu of English and Foreign Languages too offers a post-graduate Diploma Course in the teaching of English through correspondence. Two Agricultural universities – the Punjab Agricultura University, Ludhiana and the Pantnagar Agricultural University, Uttar Pradesh have also started some very useful correspondence courses for the farmers. At the school and secondary level, the Patrachar Vidyalaya of the Directorate of Education, Delhi and Boards of Secondary Education, Bhopal and Ajmer offer correspondence courses for the Matriculatio Higher Secondary and Intermediate examinations. The Hindi Directorate of the Government of India is also servicing a correspondence course in Hindi for the beginners. The latest development at the school level is the setting up of the Open School by the Central Board of Secondary Education, Delhi.

Types of courses

Most of the University Institutes of Correspondence courses offer traditional course through correspondence leading to the Bachelor's degrees in Arts, Commerce & Education. But some have started post-graduate courses also in some selected subjects. In order to make correspondence education broad-based and purposeful, some universities like Punjabi University, Patiala, Rajasthan, Bombay and Panjab University, Chandigarh, have floated a few vocational and job-oriented courses also.

Clientèle

Correspondence courses generally cater for (a) students who had to discontinue their formal education owing to pecuniary and other circumstances; (b) students in geographical remote areas; (c) students who had to discontinue education because of lack of aptitude and motivation but who may later on become motivated; (d) students who cannot find a seat or do not wish to join a regular college or university department although they have the necessary qualifications to pursue higher education and (e) individuals who look upon education as a life-time activity and may either like to refresh their knowledge in an existing discipline or to acquire knowledge in a new area. In the beginning, majority of the correspondence students in most of the universities were in-service people but now that a considerable back-log of such candidates has been cleared, the percentage of in-service students has come down. However, with the rising cost of living and a greater urge for learner autonomy, a number of young boys and girls would like to earn and learn simultaneously. Hence Correspondence Courses are bound to gain further popularity. Majority of the students belong to the age group of 16-21 (45 per cent) and 22-25 (28 per cent.

Parity with Regular Students

To ensure that the standard and credibility of the correspondence students is the same as that of the regular College/University students, the syllabi and courses of study as also the examination papers for the correspondence courses students are the same as for regular college/university students, though they vary from university to university.

Medium of instruction

The medium of instruction for the Degree Courses at most of the universities is English and Hindi; but some universities impart instruction through the regional language also,

UGC Guidelines

In order to ensure that Correspondence Courses provide quality education and maintain academic standards, the University Grants Commission has constituted a standing Committee for Part-time and Own-time Education. This Committee reviews the problems of Correspondenc courses from time to time. To streamline the working of Correspondence courses in the country, the Committee suggested detailed guidelines for correspondence courses at the undergraduate as well as the postgraduate level. These guidelines have been approved by the UGC and circulated to all the universities offering correspondence courses. Due emphasis has been laid in the guidelines on

1) Preparation of good instructional material by the best available scholars.

2) Supplementing the instructional material by:

   (a) personal contact programmes

   (b) compulsory submission of student responses and their proper evaluation and return

   (c) library facilities

   (d) radio programmes and other audio visual aids

3) Introduction of new options/subjects.

4) Appointment of essential core staff.

5) Freedom to students to shift from the regular courses to correspondence courses and vice-versa.

6) Desirability of introducing reforms in the examination system and adopting a continuous assessment system of examination by units.

7) Periodical review of the working and progress of correspondence courses.

8) Desirability of interchange of teaching staff between the university teaching departments and the correspondence courses institutes.

9) Necessity of a strong teaching faculty in the university in the subjects in which postgraduate courses are started.

10) Extension of correspondence courses to different subjects in humanities, social sciences and some of the professional areas like law, social work, library training, engineering and technology etc..

The Pattern of Imparting Instruction

Preparation of Course Material

The course material or the lessons which constitute the mainstay of correspondence education and are crucial to the success of correspondence programmes are in most cases written by experienced teachers drawn from different universities and colleges on payment of suitable remuneration. Every institute is supposed to have an Expert Committee for each subject of study. The Committee prepares a panel of lessons writers on the basis of qualifications, experience and reputation of Professors, Readers and Lecturers working in different universities and colleges in the region. The number of lessons and breakdown of topics for lessons is also discussed and decided by the Expert Committee. The Director, in consultation with the in-charge of subject assigns lesson writing work to teachers included in the panel. Broad general instructions regarding the style and format of lessons, as also detailed specific instructions for the topics to be covered, are sent to the lesson writer with the assignment letter. These lessons are thoroughly scrutunised and edited by the Correspondence Courses institutes to give them proper shape and they make necessary additions, changes etc. where necessary. Then the lessons are sent to the press or cyclostyled. Some lessons are written by the teachers of Correspondence Courses Institutes also, particularly during the slack months when there is no correction work for them. In some universities the teaching departments also help in vetting the lessons to ensure that they are of good quality. At the postgraduate level the lessons are printed under the names of the lesson-writers. In both cases the copyright of the lessons vests with the university. At the postgraduate level some institutes send package of reference material to the students in order to supplement the instruction contained in the lessons, by giving extracts from various books, journals etc. and suggesting relevant reading material, The students are also assigned topics for projects on different authors or books etc..

Each lesson or unit of lessons carries a few examination type questions which the students is required to answer and return for evaluation. Some universities also provide study notes, glossary of new terms where necessary and self-check objective type questions to enable the students to test their comprehension. A key to the answers is also provided.

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The lessons are generally sent to the students in regular despatches, about once a month, in order to sustain their interest and to ensure regular study habits. On an average a student receives about 25 lessons for each subject of study.

Some universities take pains to revise their lessons every year in the light of students' feed-back and to ensure that the contents of the lesson are up-to-date. Occasionally some lessons are got reviewed from outside experts and if necessary revised or re-written completely.. In case of changes in syllabus also, the lessons have to be re-written.

Evaluation and Correction of Response Sheets

In order to ensure a regular feed-back from the student and to assess the progress he is making with his lessons, every student is required to submit his responses to the questions given in each lesson. As per guidelines laid down by the UGC, a student is required to return 20 response-sheets suitably spread over different subjects of his study, during each academic year. However, no university has so far been able to rigidly impose this compulsion on the students. Hardly 20-25 per cent students submit the requisite number of responses at the undergraduate level, though at the postgraduate level the percentage varies from 50-70 per cent.

The students response-sheets are carefully corrected and evaluated by the teachers and sent back to the students with detailed comments and suggestions for improvement. Some institutes send model answers also in cases where the student's answer is below the mark. A proper record of marks awarded by the teacher is maintained in a register so as to keep track of the student's progress. The UGC has suggested that the student must obtain a satisfactory grade in his responses in order to be eligible to appear at the university examination. No university has so far imposed this condition.

Submission of the response-sheets, projects and test papers etc. give the correspondence courses students good practice in tackling questions and help them in preparing for the final university examination. It also establishes a useful rapport between the teachers and the pupils. The writing of these response-sheets and their regular evaluation throughout the academic session give the correspondence courses students an edge over the regular students in colleges and universities.

Personal Contact Programmes

As per recommendations of the various Committees and guidelines laid down by the UGC most of the correspondence courses institutes organise Personal Contact Programmes for their students in order to supplement instructions imparted through the printed lessons.

These programmes provide a good opportunity to the students to come in close personal contact with their teachers. Apart from the intensive class room teaching imparted at these programmes the students get a chance to sort out their individual difficulties and problems. Some of the universities organize these programmes, as also Sunday classes, at a number of stations, depending upon the concentration of students in different areas. The duration of personal contact thus provided to the students is generally 12-15 days. The percentage of students who attend these programmes varies from 30 to 50 per cent.

The common reason due to which such a large percentage of students are unable to attend these programmes are (a) difficulty in getting leave from the employer; (b) difficul in getting rail/bus travel concessions; (c) family commitments or hard circumstances; (d) financial hardship; (e) non-availability of board and lodging facilities.

However, the reaction of students who are able to attend the Personal Contact Programmes is generally very favourable and they go back with added confidence and enthusiasm to pursue their studies.

At the postgraduate level it is compulsory for the students to attend one Orientation Programme for 2-3 days and two Personal Contact Programmes of 10 days each during the academic year. Most of the universities offering postgraduate courses insist on this.

Radio Talks

Radio Talks constitute another important aspect of Correspondence education which gives the students the satisfaction of listening to their teachers. These talks can go a long way in supplementing and reinforcing the instruction imparted through the lessons. But the All India Radio has not been able to provide adequate radio coverage to the institutes of correspondence courses. Only three universities viz. Delhi, Punjabi and Punjab have been able to provide some Radio Talks to their Correspondence courses students. Apart from the need for greater radio support to the programmes of Correspondence courses, efforts need to be made to provide necessary training to teachers for writing interesting and meaningful radio scripts. Our Directorate took the initiative in this direction by organizing two Seminars on the writing of radio scripts with the help of the Director, Staff Training, All India Radio, Delhi and the Director, A.I.R. Jullundur. These seminars have made some concrete recommendations to make these programmes more useful e.g. need for greater publicity of the programmes of broadcasts, extension of talks so as to make them a daily feature, supplemental nature of talks to reinforce instruction imparted through the lessons, compiling of brochure of instructions for the talkers, replay of tapes at Personal Contact Programmes, periodical seminars and workshops for teachers, participation of students in the talks/discussions, mailing of synopsis of talks to the students and undertaking of an impact study of the programme of radio broadcasts.

Other Audio Visual Aids

Except for the limited radio support as mentioned above and occasional use of the tap recorder, the correspondence courses institutes in India hardly use any other audio visual aids or communication media to reinforce and supplement instruction imparted through the printed lessons and personal contact programme.

Library Facilities

Most of the Correspondence Courses institutes in India have an independent Library within their premises for the benefit of their students. Some institutes provide Postal Library Service also. To ensure that the Library is within the easy reach of the students, some institutes have set up Library Centres at a number of other places also. Book Banks have also been established by some of the institutes to enable needy students to draw text books on long loan.

Policy making and functioning

Policy making bodies at the national level are the Ministry of Education, the Planning Commission and the University Grants Commission. So all policy decisions regardi targets to be achieved, funding and the general guidelines to ensure academic standards ar taken by these bodies. The Planning Commission has for example suggested that approximatel 30 per cent of the total student population for higher education should be covered through correspondence courses.

So far as disbursement of funds is concerned the UGC provides an initial block grant of Rs. 5,00000 (over a period of five years) to a correspondence courses institute for starting correspondence courses at the undergraduate level. For postgraduate courses the UGC gives a grant of Rs. 1,00000 per subject, per year, for a period of five years. Thereafter the institutes are supposed to be self-supporting or to be financed by the State Governments. This is not a very satisfactory position. If the correspondence courses institutes are to be developed on sound lines they must continue to receive grants according to their needs and for any new projects or research etc. that they might plan to undertake. In fact there is need for considerable research on the methodology of correspondence education in India and that will be possible only if liberal financial grants are available to the institutes.

Relations with Conventional University Teaching Departments

On the organizational side the policy-makers in India have entrusted correspondence education to the universities, obviously to ensure academic standards. The courses offere by the commercial correspondence colleges are generally not recognized by the Government or the universities.

The control of universities over Correspondence education has no doubt given credibility to correspondence education but it has on the other hand restricted the growth of this innovative system. The academics in the universities do not generally take kindly to this system and consider it as an encroachment on their domain. They regard correspondence education as a second rate education and look down upon correspondence educators also as second rate teachers.

Since the University teachers dominate the various academic bodies, they often turn down any innovations recommended by the correspondence courses institutes with regard to new interdisciplinary options, subjects of study, job-oriented courses etc.. At the post-graduate level the UGC has entrusted academic responsibility to the University Teaching Departments concerned and this has resulted in diarchy which is hindering proper development of correspondence courses. However, in view of the problems created by this, the UGC is giving fresh thought to the matter. Most of the Correspondence Educators would welcome close collaboration with the Teaching Departments in the universities but not subordination to them. The right course, therefore, would be to strengthen the correspondence faculty and to give adequate autonomy to the institutes with regard to options, subjects of study and course content etc..

Staffing Pattern

So far as staffing pattern is concerned, each institute is headed by a Director/Principal who is responsible for the over-all supervision and administration of both the Academic and the administrative wings. On the academic side the institute is supposed to have at least core staff for each subject of study. The senior most Reader or Lecturer in the subject is designated as incharge of his/her subject. Each institute decides upon the number of teachers in different subjects according to its average enrolment. For the postgraduate level courses the UGC sanctions 2 readers and 3 lecturers for each subject.

The Correspondence courses Institute is supposed to have an Expert Advisory Committee of experienced teachers drawn from the University teaching Departments, the institute and some colleges to advise and assist the institute in academic matters.

There is also a provision for associating experienced teachers of University teaching departments and colleges as Guest speakers and lecturers at the Personal Contact programmes.

On the Administrative side the Director/Principal of the Correspondence Courses Institute is assisted by the Deputy Registrar and/or Assistant Registrar with adequate Secretarial and supervisory staff to man the different sections.

The Organizational chart at Appendix I indicates the general pattern of organization followed by most of the correspondence courses institutes in India.

General observations and suggestions

Position regarding commercial correspondence colleges, mass media and national system has already been discussed in the resume of Indian experience in Distant Education. So I would conclude my paper by making a few general observations and suggestions, and look forward to a very useful exchange of views with my fellow correspondence educators and experts from different countries who are participating in this international Seminar:

1. Distant Education should be so organized and broad-based that besides extending and equalizing opportunities for higher education it should make education relevant to the needs and aspirations of the people.

2. There should be comprehensive surveys at the national and regional levels to assess the educational needs of society in order to be able to plan relevant and meaningful courses.

3. There should be considerable flexibility with regard to courses to be offered and the Distant Education Institutes should not hesitate in discarding some courses which have outlived their utility, and adopting new courses which may be in demand. The Distant Education Institutes must enjoy autonomy for starting new courses and subjects so as to conform to the ever-changing demands in the field of education.

4. The Faculty in Distant Education Institutes must be strong and independent, and the academic responsibility for Distant education courses must vest with them. However, there should be close collaboration with the Teaching Departments in the universities.

5. Frequent in-service training and refresher courses should be organized for the Faculty members of the Distant Education Institutes. It would be worthwhile starting Correspondence Courses for Distant Education teachers to train them in different aspects of Distant Education.

6. There should be close collaboration among different institutes to work out possibilities of common course material, Personal Contact Programmes, study-cum-library centres, Radio & T.V. programmes etc..

7. International organizations like the UNESCO, International Council for Corresponden Education, Centre for International Co-operation and Services of the Open University, England, International Extension College, England, National Associations of Distant Education and Foundations like the German Foundation for International Development should work out the possibilities of close collaboration, for providing the latest know-how on Distant Education and Technical as well as Financial assistance to upcoming institutes of

Distant Education, particularly, in the developing countries. They should also launch some well thought out Research projects for intensive research on different aspects of Distant Education.

The Future

Distant Education has a great future and very important tasks to fulfil, and if the international and national organizations concerned put in sincere and concerted efforts, there is every reason to hope that we would succeed in achieving our targets. I am sure this Seminar would be a positive step in that direction.

3.7.2 Discussion

The ensuring discussions revealed that the Tunisian experiences had found an answer to the problem of poor responses from students in that country. The responses were before only 10%. Students who fail to respond are now required to refund to the Government the tuition fees payed for them to the correspondence institute. After an ECA mission many changes had been made in the strategy of the correspondence institution with very good results. The Tunisian representative wanted to come back to this in a later stage of the conference. He mentioned that personal contact problems have been taken care of by teachers going out to meet their students.

3.8 Address by Dr. W.A. Jayawardana, Director, External Services Agency, University of Sri Lanka

Talking about the position of Distance Education in Sri Lanka, Dr. Jayawardana stated that Buddhist philosophy emphasises the equality of persons and the development of the personality. There is as a result great popular pressure for educational equality and the provision of opportunities for access. These sentiments have dominated post-independence (1948) education in Sri Lanka. In the higher education field there are now 7 conventional universities with some 20 000 students (annual intake 5 000), but to meet the demand three institutions have been founded, in addition to private correspondence colleges:

1) The External Service Agency (founded 1972) took over the extension programmes previously attached to the universities. It has some 35 000 appropriate qualifications for entry to conventional higher education for whom there are no places, and persons in employment wishing to continue study. It offers courses in a number

of subjects (art, science, law and economics) but has until recently not given any support to students, who were merely registered and examined. More recently, radio broadcasts and face-to-face sessions in local centres had been introduced, and there is a district-based library service.

2.) The Institute of workers education (founded 1975), had 700 students in 1976 in evening classes based on 3 traditional university campuses. Students, who are workers selected by trade unions with minimum schooling to grade 7 level, are required to take a foundation course of one year and if successful can go on to take a diploma (2 years) and thence a degree. The Institute caters for a very small percentage of the working population.

3.) Sri Lanka Institute of Distance Education (SLIDE) founded in 1976, has around 5 000 students on courses leading to diplomas in Science, Mathematics, and Management Sciences. It uses correspondence texts, face-to-face sessions and counselling, and cassettes. Rapid expansion of the system was planned.

Recently (1978) the Government has established the Sri Lanka Open University (SLOU). Initially this institute will concentrate on certificate and diploma courses, and on courses of a vocational nature. It is planned that SLIDE and the External Services Agency should be incorporated into the SLOU, but integration of the latter would be difficult to attain immediately given the large number of students in the service. Courses are planned in management studies, science, mathematics, educational studies, languages (especially English), technical and vocational studies. SLIDE's existing regional facilities will be expanded.

The SLOU faces a number of problems:

(i) lack of resources (financial and personnel);

(ii) the fact that teaching is undertaken in three languages of which English and Tamil are minoring languages;

(iii) the students currently assigned to the External Services Agency will need to be catered for in the interim period;

(iv) the lack of well-trained staff in communications technology

However, there are advantages:

(i) the acceptance of education as a life-long requirement for personal growth, and awareness of the value of education, in Sri Lanka;

(ii) the high literacy rate of nearly 90% in the country;

(iii) the demand for education and eagerness to profit from opportunities;

(iv) the compact size of the country, with a faily well-knit transportation system and relatively good postal system;

(v) the existence of a fairly extensive infra-structure at governmental and voluntary levels.

Dr. Jayawardana had prepared papers for the conference, one of which is produced here after:

3.8.1 PROPOSAL FOR THE ESTABLISHMENT OF AN OPEN UNIVERSITY SYSTEM IN SRI LANKA - by W. A. Jayawardana

The Development of the Open University System

Universities the world over have generally been regarded as belonging to the category of institutions strongly resistant to change. This is neither surprising, nor unnatural, when we recall that the western universities had their origin and development unto very recent times in medieval, ecclesiastical surroundings. Such change as did occur, hardly noticeable at the beginning, continued to be dominated by the iron disciplines of the 'Trivium' and 'Quadrivium' almost upto the beginning of the 18th century when they began to evince a gradual responsiveness to change. Even after this, the continued dominance of Greek and Latin stifled any real advance particularly in the field of mathematical and scientific studies. It was in fact as late as 1919 that in England, a Prime Minister's Committee declared that the demands of the new scientific and social studies left no room in school and university syllabuses for Greek and Latin studies as hitherto.

The social, economic and political changes that emerged after the cataclysm of the First World War not only shattered the elitist and monastical basis of these institutions but also accelerated the pace of change there. The resulting burst of a large outcrop of 'civic' universities on the one hand, and on the other the expansion of the narrow and restricted fields of academic disciplines hitherto pursued, altered the entire landscape of university organization and studies.

The Second World War had an even greater impact and produced more revolutionary changes so far as the Universities were concerned, wiping out almost in its entirety the already shaken and battered pre-war edifice and replacing it with a new ideal and new dimensions in university studies and teaching both conceptually and structurally.

Noticeable in this transformation were several new trends particularly in regard to tertiary and higher education, putting under severe strain some of the established educational practices and theories. Perhaps the most vital and far-reaching among them was the new concept of education as a lifelong process "education permanente". Recurrent or continuing education thus came to be regarded as an integral part of the national education system. Adult education programmes which hitherto had been kept alive, mainly by charitable social service organizations, suddenly achieved a position both in importance and academic recognition. Another of the earlier educational ideals which was dethroned in the years after the World War II was that of eliticism in education particularly in regard to universities consequent on the spread of egalitarianism in society as a whole.

The adoption of these new concepts resulted in greater provision being made for school leavers to continue their education not only in conventional universities but also in other degree granting institutions. At the same time provision of educational opportunities was made to enable adults who had been 'born a generation too soon' and were thus deprived of these benefits to have a 'second chance' in education.

The proliferation of these new trends was greatly facilitated by the increasing adoption of mass-media for educational purposes. The choice and extent of their use however varied from country to country depending on factors peculiar to each one of them. A number of countries have initiated correspondence and radio programmes designed to support teaching at both, pre-university and university level.

To mention a few of the better known examples: vast strides were made in countries like Australia and Canada which played a pioneering role in the institution of the 'part-time' student instructed through mass media within the conventional university system in addition to the normal intake of under-graduates who received full-time formal instruction. Educational broadcasting came to be widely used in the United States of America although its development on a national grid was rather slow owing to the responsibility for education being vested under the constitution in the State legislatures. In the Soviet Union correspondence lessons were used in a much greater extent than broadcasting and by 1960 nearly 40 per cent of all graduates had followed at least part of their courses by correspondence. In the United Kingdom, the British Broadcasting Corporation came to play an increasing role in developing adult educational programmes and in the production of courses offered in partnership with the National Extension College Cambridge and other programmes while correspondence tuition was provided mainly through private enterprise for those preparing for external degrees of the University of London. Japan made remarkable progress in the integrated use of correspondence and radio in its teaching programmes for those who were unable to continue their education otherwise. A number of other countries had initiated similar programmes.

Thus by 1960s closely integrated use of correspondence tuition, broadcasting and television and face to face teaching had begun at all levels of teaching within the context of national educational systems of most of the developed and developing countries in the world. The universities by now had lost their 'ivory tower' isolation and had become one of the recognized instruments of social change. It is true however, that these changes were brought about more as a result of external pressures, mostly political, rather than voluntarily from within the universities where most academics still continued to look upon the new changes with a degree of scepticism. A compelling force for the democratization of the universities was exerted by the legislators, who came in increasing numbers from the middle and lower middle classes and demanded a fair return from the universities to the community at large for the public funds voted for their upkeep.

The former British Premier, Mr. Harold Wilson's announcement while in the opposition, in a political speech in Glasgow in 1963, of the proposal to establish a 'University of the Air' marked another significant step in the changing role of the Universities. The original intention appears to have been the establishment of an institution within the existing university system with their close collaboration and co-operation. The suggestion had even been made to award the external degrees of the University of London to its students, thus keeping within the framework of the current pattern of development.

The institution that finally emerged (through the Planning and Advisory Committee) however, as the 'Open University' - an 'apparent contradiction in terms though' - was an independent university awarding its own degrees but making use of the facilities of the existing universities. This institution, unique in several respects, added another dimension to the changes that were taking place in the university system. The establishment of the Open University, soon copied by a few other countries such as Pakistan and Iran forms an important landmark in the democratization process set in motion almost half a century ago.

The Open University concept has been extended still further in the United States of America by individual universities as well as by associations of universities. The University Without Walls (UWW) is an association of a number of universities and colleges experimenting with a host of learning experiences such as course work, internship, projects, independent study etc., without prescribed curricula or strict time schedules for completing their degree programmes. The University of Mid-America (UMA) is a major regional experiment in 'Open Learning' by a consortium of nine Universities in the mid west. The National University Extension Association comprising of public and private institutions offer extension and continuing education programmes extending the resources of the universities to meet the needs of an increasingly complex society. In addition to group organizations of the type mentioned above almost all universities carry out extensive continuing education programmes of their own.

The Open University System has several distinct features of its own, some of which were introduced for the first time.

Enrolment

The most innovative of them is the principle of open entry dispensing with the need for specified academic qualifications mostly of a competitive nature as prerequisites for admission as in the case of conventional universities. In other words, the Open University opens its doors to anyone who has the capacity to follow its courses. Simple as the principle may sound its implementation was found to be by no means simple. The large numbers who sought enrolment had necessarily to be restricted by resort to pragmatic devices such as limiting enrolment on the basis of 'first come first served'. Further, not all those who have thus enrolled are likely to have the capacity to go through a part-time academic course at a comparatively mature age while being in full-time employment. Not all the hopefuls would probably succeed in reaching the goal.

Foundation course

In order that the potential candidates may judge for themselves whether they have the capacity to be benefited by this facility as well as to minimize the number of 'fall-outs' inherent in any self-teaching programme, a kind of screening or apprenticeship period has been devised by the introduction of what is generally referred to as the Foundation Course. The Foundation Courses which are of multi-disciplinary nature have been carefully designed not so much to judge the academic attainments of the candidates in a particular field or fields of study as to enable him or her to decide whether they possess the ability to pursue a sustained course of advanced study. They also serve the purpose of a re-introduction to studies giving the basic essentials required in order to proceed to the intended courses. Initially the candidates are expected to take the Foundation Course and those only who successfully complete it could proceed to the next year of the course of their choice.

Instruction media and study process

As referred to earlier, the Open University System relies upon a variety of distance teaching methods each one of them forming a component in an integrated scheme of 'systems approach' to learning; the basic components being the correspondence lessons, radio (and television where available) programmes and periodical face-to-face teaching. These are supplemented in varying degrees with audio visual aids such as cassettes, tapes, film strips and with 'science kits' for science-based courses. The introduction of communication satellites, the increasing use of telephone systems for tutorials and conferences telephone links and other devices being introduced with the rapid advances made in the field of radio and telecommunication technology may bring about, in the not too distant future, even more revolutionary developments in the use of mass media for educational purposes.

The self learning process on which the success of the entire teaching learning system rests , depends on several learning activities on the part of the students. They are expected to study systematically the correspondence material and answer the written assignments, listen to the radio broadcasts and view the television programmes regularly and attend the periodical teaching classes, summer schools and counselling. Except for the scheduled items each student fixes his own pattern of study to suit his individual needs and aptitudes.

Course teams

Another innovation of the Open University system is the concept of the course team. In the conventional universities the preparation of the teaching lessons is the sole responsibility of the members of the academic staff. In most instances lessons are not prepared much in advance. There is no particular need for this either, and it is always possible for a lecturer, if the need arose, to 'polish up' or even prepare his lesson just before its delivery.

In the Open University, the preparation of the courses is a much more complex one involving several processes. It involves the preparation of the lessons for transmission through integrated multi-media processes , at the same time ensuring their accreditation. This complexity necessarily requires the combined efforts of a team of experts for its successful completion. While the academics will be responsible for the creation of the lessons and their contents, the services of educational technologists and the radio and television personnel will be required for their production in a way suitable for transmission through distance teaching methods to adult audiences most of whom would probably have little time to spare for their studies. All this means that a lesson will have to be ready, through the collective participation of a team of specialists, very much in advance enabling the completion of all the processes - creation, production and transmission before it finally reaches the student.

Regional centres

Another feature of the Open University system is the development of the regional and study centres. Unlike in the conventional universities where students attend regular lectures and tutorials in their classrooms, in the learning teaching process of the Open University, the lessons go to the students who are scattered in different parts of the country and who study by themselves in comparative isolation. In order to provide the teaching component and the supporting services of these students they are divided into a number of regions, each regional centre having a number of study centres depending on the geographical distribution of the students and the availability of physical facilities. Study centres are the places where the students meet their tutors and counsellors, arrange their summer schools and other teaching programmes and obtain whatever other supporting services may be available to them. The centres also provide almost the only means of contact with their widely dispersed fellow students.

Degree accreditation

One of the most important safeguards that the Open University has to adopt is to ensure the quality of the degree it awards and their acceptability. Open entry without academic pre-requisites, non-conventional teaching methods and the novelty of the organization itself, make the general recognition of its degrees all the more difficult. The traditional universities which follow the British pattern ensure the maintenance of their academic standards by resorting to two important devices. The charters of the new universities in the United Kingdom provide for the establishment of an Academic Advisory Committee, consisting of senior and respected dons from the older universities. This Committee which has power to override the decisions of the Senate of the new University, is vested with responsibility over all its academic activities - teaching programmes, examinations and degrees etc., and functions normally for a five year period until the new institution establishes itself. This arrangement guarantees that the requisite academic standards are maintained in the new institution during its formative years and it does not fall into either extreme of being too rigid or too liberal. The other safeguard is the appointment of external examiners from other universities who not only function as co-examiners but also evaluate the courses of studies and teaching programmes as well. The Open University in Britain has followed its conventional counterparts in this respect and has adopted both these procedures.

Finance

Cost effectiveness is one of the main attractions of the Open University system. The very large numbers that could be catered to under this system at comparatively low cost, in contrast to the limited enrolments in Campus Universities, is one of the main arguments adduced in its favour. It is generally regarded that the cost per Open University student is only one-third to one-half of the cost of Campus student. The Open University system has still not functioned for a sufficiently long period to draw any valid comparison with the established universities as to the possible and potential total cost reduction per student. A whole range of factors will have to be taken into account before any definite and reliable conclusions are reached.

It is often argued that with the high rate of drop-outs the more appropriate basis of comparison is the cost per graduate and not the cost per student. The counter argument however is that the substantial marginal benefits gained by large numbers following these courses but not necessarily proceeding to the degree, should not be altogether ignored in any determination of relative costs.

The capital expenditure of the Open University in the form of buildings is minimal as it makes use of existing infra-structures and needs very few special buildings of its own. Most of its teaching staff consist of full-time members of other institutions employed by it on a part-time basis. Its recurrent expenditure comprises two basic components. The first represents 'unavoidables' or 'overheads' and includes expenditure on preparation of materials, salaries of full-time staff, maintenance of physical plant etc., largely but now wholly independent of student members. The 'direct student costs' made up of a number of items supporting the students themselves such as printing, postage, packing, hire of buildings and equipment and payment to part-time staff is the other component. Thus compared with the capital and running costs of conventional universities, the operational cost of the Open University, on any evaluation seems appreciably and attractively low.

Future

Dependent on the existing educational institutions for its very existence, the Open University is necessarily complementary to the conventional universities and not an alternative or rival organization. Originally intended for the relatively narrow purpose of providing higher education to those, who, for any reason, had been or are being precluded from having this opportunity through the existing institutions, the Open University is rapidly taking its place as an important component of the higher educational system in several countries.

The Open University system and the traditional system seem to be imitating each other in a significant way. While the Open University continues to acquire features of the conventional universities by establishing bigger and bigger 'campuses' recruiting more and more permanent staff and copying their structures, the conventional universities have in their turn responded by adopting some of the innovations of the new associate such as its delivery systems, pre-prepared courses and credit awarding patterns.

This interplay continues to gather momentum. So much so that it is not inconceivable that in the not too distant future the emergence of a national university system incorporating features of both the new and the prevailing system and in the process the two systems losing their separate identity and individuality. In fact, signs of this synthesis have already begun to show themselves.

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3.8.2 Discussion

Dr. Jayawardana stated at the end of his address that Distance Education is clearly established in Sri Lanka. It will not be applied to secondary education because that is already well catered for. Nor will it be applied to the post-graduate level because this is too expensive, nor research at least for the moment. However, it offers the best way of meeting the demands for post-secondary qualifications, and for technically and vocationally trained personnel. The SLOU will need to co-operate with existing universities in order to make best use of the available manpower, which is short in supply.

3.9 Address by Miss Therese Shak, Caritas Adult Education Centre (CAEC), Hong Kong

Miss Shak had supplied copies of some materials on Caritas Adult Education Centre for delegates. Also copies of some course materials were available for inspection; for this purpose a display space had been arranged by ECA, where many delegates could put course materials.

Hong Kong, a British Colony, is 104 square miles in extent and has 4.7 million inhabitants. Of the population aged 15 or more, half a million are illiterates and 42 % received education only up to primary school. Free education at secondary level to age 15 was only introduced in 1978.

Caritas International is a federation of Catholic charities, each of which is autonomous under the bishop of its area. Caritas Hong Kong began 25 years ago, and works in the fields of medicine, social work, and education. In the field of education, its aim is to provide facilities in areas not covered by the Government of Hong Kong. Therefore Caritas concentrates on adult education, vocational education, education for handicapped persons, and education at kindergarten level. In its adult education field, Caritas had 28 000 students in 1978 at 14 schools. Financed through fees, it charges different fee levels for the same course at each of its centres, so as to minimize the disincentive of fees to those of its target population who come from socially and economically deprived areas.

Purposely, CAEC stresses the multi-media approach it has taken, in order to avoid the stigma given to correspondence courses by some commercial correspondence schools in Hong Kong.

In October, 1976, the following article on the Multi-Media Educational Programme was published, which content was the following:

3.9.1 Multi-Media Educational Programme

Caritas Adult Educational Centre has launched a new programme, Multi-Media Educational Programme. This new programme is, in fact, a secondary school by correspondence. Adult Educational Centre has spent ONE million Hong Kong Dollars in preparing this programme and one whole year has been devoted to the writing, editing and printing of textbooks.

Our Purpose of launching this programme

1. To give those who have been deprived of proper schooling opportunities of receiving basic education. Though the government has recently announced the compulsory three year Secondary School Education Project, we learned from the Education Summary 1971-1975 only around 50% of the age group 12-17 received secondary education during 1971-1975. The other 50% who were not enrolled in any school during that period are now too old to benefit by the government's new education policy. This is our main reason to launch the Multi-Media Educational Programme.

2. Our Multi-Media Educational Programme can also be helpful to the invalids, to those who are in any way impossible to follow regular classes and to those who want to up-grade their professional abilities.

Multi-Media Educational Programme offers secondary school subjects, commercial courses and recreation courses.

English	Level 1 - Level 4, 5
Chinese Language	Level 1 - Level 4, 5
Chinese History	Level 1 - Level 4, 5
Mathematics	Level 1 - Level 4, 5
Integrated Science	Level 1 - Level 4
Biology	Level 4, 5
Social Studies	Level 1 - Level 3
Economics	Level 4, 5

Bookkeeping	Elementary
Japanese	Elementary
Mandarin	Elementary
Guitar	Elementary

Multi-Media Educational Programme is a New approach to Education because

1. This programme is conducted through the following means:

    11 Correspondence
    2. Cassette tapes
    3. Telephone tuition
    4. Class tuition
    5. Radio

2. Time for completion of subjects is very flexible. The minimun time for completing a course is 4 months or 6 months. The maxinum time for completion is 3 years.

3. Students can choose subjects according to their own interest and standard. For example, student A intends to take English, Chinese and Mathematics but his standards in these subjects are level 2, level 3, and level 4 respectively. He can start with level 2 English, level 3 Chinese and level 4 Mathematics and he has to work at the required speed to ultimately bring all his subjects to the level required for public examination. Subjects taken can be accumulated.

A Real Approach to Education is the essence of the Multi-Media Educational Programme because this programme encourages the students to have self-motivation, self-discipline, self-controlled speed and self-accessment in the field of learning.

From the above-printed paper it has become clear that the programme uses cassettes, radio and face-to-face sessions, correspondence and telephone tuition. Television is not used because channel access tends to be determined by the head of the family, and ignores the needs of the student. There are high radio and telephone ownerships rates in the colony. CAEC had very useful links with Radio Hong Kong. Student study groups has not been made great use of, in spite of the density of population, because of lack of accommodation. The Course Writers decide which media to use. Caritas has provided instructions to writers of correspondence courses.

CAEC carried out a sample survey before launching the Multi-Media Educational Programme in 1975. It would go beyond the scope of this report to reproduce the report.

Miss Shak stated that CAEC hopes to establish studies in the near future. It wants to be subsidized by the Government, so that fee levels can be brought down. At present, it has a 20% budgetary deficit which has to be met from raising campaigs. It also faces problems because texts are often not available in Chinese; because it cannot afford to train its authors properly; and because of its high staff turn-over.

3.10 Hearing: Asian Panel

An all-Asian Panel gave reactions on questions of delegatès in plenary session.

Moderator: Ato Girma Bayouh, Ethiopia

Participants: Prof. R. Crocombe, University of South Pacific
Dr. W.A. Jayawardana, University of Sri Lanka, Sri Lanka,
Miss Therese Shak, Caritas Adult Education Centre, Hong Kong
Prof. B. Sing, Punjabi University, India

Delegates drew on matters that had been raised in the presentations by Dr. Jayawardana, Miss Shak and Prof. Singh.

The use of media and in particular radio provoked considerable discussion. Experience in the University of the South Pacific (USP) shows that radio - and particularly the two-way communication by radio - is a useful adjunct to correspondence teaching in stimulating the students. It was considered to be wasteful to use media - radio, television, tapes and cassettes - to deliver lectures. The content of lectures can be much better purveyed through print. This has proved not only to be much cheaper, but from point of view of learning much more effective. USP uses satellite only because of the distances covered by the University, which has students in ten countries as much as 6,000 kilometres apart. Radio two-way communication is used to provoke discussion on a weekly basis after the students have (1) read the texts; (2) met a local tutor at a local centre, and (3) in the case of some courses, done a small assignment, which has the purpose of concentrating their minds (some courses have assignments every 2 or 3 weeks). Discussions usually linked students in 2 to 4 countries. This is found to be the optimum link up, since inter-country dialogues can develop. Where only one country is linked to the tutor, the latter tends to dominate the session, while if all countries are involved, discussion becomes very difficult. USP is able to use its satellite because it has been provided free of charge; otherwise it would have been too expensive. It does not use the TV potential of the satellite for cost reasons. There is grave danger that the use of technologies, and particularly expensive ones, will be seen as automatically improving the teaching. USP does not believe this to be the case.

3.10.1 Extra Information on the University of the South Pacific

The Institute of Pacific Studies at the University of the South Pacific, was established in 1976. Its work is concerned with five major subjects areas, all within the social sciences

a. Land tenure and rural development;
b. Government and politics;
c. History and biography;
d. Social and cultural studies;
e. Language and communications.

Its primary focus is on the eleven English-speaking countries of the central South Pacific which are served by the University, but the various projects concerned with the Pacific region cover a wider area (Papua New Guinea, New Caledonia, French Polynesia, the U.S. Trust Territory and various others).

The Institute has only three full-time academic staff and sees its primary task as the development of skills and confidence and the production of useful research data and publications, primarily by citizens of the region served. This is achieved by facilitating their undertaking research, writing, consultancy and teaching, with IPS participating as appropriate. It is a time-consuming task, but has proved well worth-while. Results so far have given confidence to continue pursuing this broad course in the immediate future. The IPS Advisory Committee has endorsed this policy.

Over 300 Pacific islanders have written and published, or are in the course of doing so, in association with the Institute: nearly 100 per year of operation. Consultancy and teaching have likewise been designed to facilitate maximum involvement of regional personnel. Another 600 or so persons have taken IPS courses.

Much of the Institute's work is carried out in co-operation with the Extension centres, the Schools and other Institutes, or with member Governments, regional organisations and individuals. Their helpful cooperation is gratefully acknowledged, as is that of the members of the IPS Advisory Committee.

a. Land Tenure and Rural Development

Perhaps no topic is more intimately related to social and cultural systems in the Pacific than land tenure. It is also closely related to economic and political systems and problems. Small-scale studies are now being undertaken by local citizens (civil servants, university students and others) in various countries of the USP region. The Institute is assisting with supervision, editing and preparation of the studies for publication. So far the emphasis has been on rural land problems, but some work has been done on urban land and water rights.

b. Government and Politics

Pacific governments are the smallest of the world. Excluding Papua New Guinea and Fiji, they average only 50,000 people per nation. The imported structures are diverse, the traditional backgrounds even more so. Compared with most of the world, Pacific governments have a record of relative harmony and stability. But many of their problems are unique and influenced by extremely small size, geographical fragmentation, cultural diversity and a range of external influences. The IPS emphasis is on facilitating exploration, mainly by citizens of the countries concerned, of the problems and the potentials for resolving them.

c. History and Biography

To date almost the only perception of Pacific history is that written by Europeans. The only biographies islanders read are those of people in other ages in other parts of the world. To help redress this balance a little, the Institute has put considerable emphasis on facilitating historical perspectives from within.

d. Social and Cultural Studies

These are largely, but not exclusively, problem oriented. The concern is with socio-cultural issues today - a dynamic interaction of traditional and forei precedents, often evolving in new shapes that have little precedent in either source.

e. Language and Communication

Over 200 indegenous languages are spoken in the area served by the University of the South Pacific. No country in the region uses only one language (in the way say Japan or Australia does). Some use two - their own language plus English (Cook Islands, Gilbert Islands, Nauru, Niue, Western Samoa, Tokelau Islands, Tonga, Tuvalu); Fiji uses three mayor languages (Fijian, Hindi and English) plus about ten minor ones; and the New Hebrides and the Solomon Islands have about 100 languages each plus linguae francae - Bislama/Pidgin and English (and French in the New Hebrides). In some places, fuller recording and analysis of the indigenous languages is desired but more generally questions of language policy are being further explored, and problems of language learning are widespread matters of concern.

f. Teaching and other IPS Activities

The staff of IPS is involved in lectures, e.g. Principles and Problems of Land Tenure and the Pacific Studies Course for the School of Natural Resources. The staff members have a heavy load of other teaching committments, giving casual lectures by request to various courses in USP campus and centres, public lectures and radio talks in countries of the USP region The staff contributed also in the last few years to courses mounted by WHO, the Diploma of Youth Development being run by the Commonwealth Secretariat, courses for the Peace Corps, etc.
Courses for teachers college lecturers in Pacific Studies are provided. Most teacher's colleges, and some theological and higher secondary colleges are now teaching courses in Pacific societies and cultures, Pacific history, Pacific languages. There are refresher courses available to upgrade lecturers in

these and other fields.

Orientation for expatriates, however important because the need for this has been raised twice and because of the interest sounded it could be easily self-financing, has not get off the ground because of lack of staff.

A Pacific week each year is arranged and co-ordinated by IPS with the cooperation of schools and student bodies. Several one-month Pacific programmes have been devoted to separate national and regional topics to heighten awareness of the nations separately as well as of the Pacific as a whole. Films, lectures, cultural displays and other performances are presented by student groups and others. Fact sheets are produced and distributed to the University extension Centres and to other institutions. Some radio programmes have been produced.

Consultancy on policy and practice relating to land tenure, social and cultural matters have been undertaken in a number of countries of the region. The Institute has participated in an evaluation of foreign aid to the Pacific for the South Pacific Forum, an evaluation of rural adult education for the Marist Province of Oceania, lands administration and policy for the Governments of the Solomon Islands, Cook Islands and Papua New Guinea (and requests from the Gilberts and New Hebrides have been received), Pacific Studies content in the curricula of theological colleges for the South Pacific Association of Theological Schools and the Pacific Conferences of Churches, planning of the development of Yalavou for Australian aid, of Uluisaivou for New Zealand aid, for the U.S. Peace Corps on Pacific content in training, as well as a range of less formal consultancies for governments, institutions and others in many countries of the region.

The Satellite Communication Project

The USPNET Satellite Communication Project supports and strengthens the regional out reach of Extension Services. Under the auspices of the United States National Aeronautics and Space Administration, with the co-operation of regional Governments and financial support from the Carnegie Corporation, the University began participating in educational radio projects of an experimental nature using the NASA ATS-1 satellite in 1972.

Initially joining the ATS-1 link under the Hawaii-based PEACESAT Project. USP applied to NASA for permission to operate its own experiemental programme in 1973. The request was granted and the University installed two-way radio terminals in all its regional Centres (with the exception of that in the Cook Islands, where facilities are shared with a PEACESAT advisory group and operated by the Government). Stations were also installed at Malapoa College in New Hebrides, and in Tuvalu.

This system has proved invaluable, not only in enabling students to speak directly to tutors in Suva, but also in facilitating the administration of an increasingly complex regional operation.

In 1978, additional funding was secured from the US Agency for International Development to upgrade and expand the satellite communication system. In 1979 a network of thirteen terminals was established, providing not only two-way audio communications but also a range of other educational facilities including various methods of video transfer. This experimental system is planned to provide the University with the data, and experience, necessary to translate to a long-term communication capability around the region, using the developing regional telecommunications network.

Continuation of Hearing: Asian Panel

The experience of Hong Kong, Sri Lanka and India also showed the value of radio, which was very flexible in as much as persons can tune in on battery operated transistor sets very easily. It is thought to help remove the feeling of isolation between tutor and student, and it also has spin-off effects in advertising courses, and in being of benefit to casual listeners. However, in a number of countries the transmission times given to institutions are frequently at poor (non-peak or even marginal) times.

There is as yet little experience of drop-out rates. In India, drop-out is a problem, even in conventional universities. In Punjabi University, every effort is made to minimize it. Thus, students are encouraged to complete a course, even if they do not intend to sit the examination, since completion gives them the opportunity to sit the exam at any time in the next three years. It is also thought that the incentive of working for a degree result in a lower drop-out rate.

Finally, delegates discussed the role of continuous assessment. It was felt that its use incalculates study habits in students. The Zambian project depends on continuous assessment, for this alone shows how the student is progressing. Continuous assessment grades count for 50 -60% of the overall course grade.

3.11 International Panel: The Sharing of Distance Education Materials

The necessity was felt by delegates to organise a special session on the sharing of distance education materials and therefore the Steering committee decided to devote an extra session on this subject. A panel was formed:

Moderator : Professor R. Crocombe,
University of the South Pacific

Members : Dr. J.K. Ansere (Ghana)
Dr. W.A. Jayawardana (Sri Lanka)
Dr. O.P. Kulshrestha (Sri Lanka)
Mr. D. Skar (Norway)
Mr. R. Twite (United Kingdom)
Mr. N. Wali (Nigeria)

Members of the panel and delegates were without exception in favour of the possibility of sharing educational materials. However, the discussion drew out the many practical problems involved.

The exchange of materials from one culture to another, from one environment to another even though there might be much in common - culturally speaking - brought up all sorts of problems. Examples used to illustrate themes might be inapplicable out of the original setting.

Generally speaking it was found that interchange across cultures was easier at the tertiary education level, where it was most likely to be inappropriate. Materials might have to be adapted or partially redesigned. Such alterations could be expensive, and at the extreme adaption might be as expensive as production of purpose-built materials. There were examples of fairly successful use of foreign materials. (In this relation the use of UK/BBC films on the teaching of English in Mauritius was mentioned, and the use of Dutch Philips materials in Sri Lanka). At times the existence of readily available audio-visual materials affected curriculum design, rather than vice-versa. Although one aim of education was to transmit the heritages of a society from one generation to another, the problems of cultural differences did not always arise.

The use of materials produced elsewhere could be particular expensive if translation was involved. There were, however, also human problems to overcome. Academics frequently felt that they could do a better job, and if adaptation was involved, costs would rise. Producers and directors had a professional interest in production, and not in identifying suitable pre-existing materials. The cost of copyright had to be considered too. However, knowledge of what had been produced elsewhere was always valuable since it could give ideas to course writers and producers/directors. The difficulty was to know what was available. Not many institutions had the sophisticated sales machinery of the United Kingdom Open University.

There was thus an urgent need for some mechanism which could pool information on materials. Although some scepticism was expressed as to the feasibility of so doing, given the costs involved, and the large bulk of materials produced by many different institutions, the International Bureau of Education (IBE) in Geneva had an unsurpassed collection of materials on distance education, much of it drawn from the International Council for Correspondence Education (ICCE). However, institutions would need to make their materials available to the IBE if the IBE were to serve as a centre for those materials. The IBE would also need approval from its governing body - the Ministers of Education of all member countries of UNESCO- if it were to spend funds in this area. The International Council of Correspondence Education was affiliated to UNESCO as a category B institution, and hence had certain advantages. It could therefore approach UNESCO, or an approach could be made directly to IBE. The conference was lucky in having the presence of Professor B. Singh, the President of ICCE.

It was reported that the United Kingdom Open University was trying to establish an International Institute of Distance Education, one of whose functions was to have an Information and Resources Centre.

Cooperation in other fields was also discussed. The joint use of hard ware was possible, although there were attendant problems of access to equipment and facilities at the times most required by users. The interchange of documents, such as annual reports, research and evaluation reports was felt to be the most useful, as was the interchange of personnel. Joint production ventures might also be valuable cost-saving devices. The experience of the United Kingdom Open University was that these worked best where close personal contact could be maintained. It might be possible to develop common draft materials, and introduce changes at final draft stage to reflect local requirements.

Conference resolved to establish a sub-committee to consider the issues raised and to bring forward a paper to a plenary session. Appointed members of this committee were: Dr. Kulshreshtha, Professor Singh, Mr. Twite and Mr. Wali.

3.12 Excursion to Ethiopian Institutions

One morning was spent to visit some of the Ethiopian educational institutions in Addis Ababa:

(i) The Mass Media Centre
(ii) The Department of Adult Education with the Distance Education Division.

3.12.1 The Mass Media Centre provides radio and television educational broadcasting services to schools and the general public. The project has been supported by UNICEF; the International Bank for Reconstruciton and Development (IBRD), and the Overseas Development Ministry, U.K. (ODM). With financial assistance from UNICEF a great number of radio sets, especially developed for third world countries by the Dutch multinational Philips, have been distributed all over the country. IBRD has provided funds for transmitters to be established in many places in Ethiopia to ensure good reception in far away places and remote areas. For a long time ODM had joined in this venture by supplying equipment and an expert, but the English organisation had stopped the assistance a few years ago because progress was not satisfactory. The English expert, after pulling out of ODM, had been taken over by the Ethiopian Government. However, the expert had left in June 1979 at his own request. In the planning of the Mass Media Centre there are in my opinion some very weak points:

a.) The overseas expert has left at a time that his advisory task was not yet finalised. Transmitters arrived a few months before his leaving and the Ethiopian staff is not yet trained to take over the task without the technical guidance by an expert;

b.) the map shows an impressive planning concerning the establishment of transmitter stations. However, many transmitters are planned in areas where actuall it is difficult to establish them.

There was a project to prepare a series of films on other African countries. The problem, however, was to find suitable indegenous materials to make us of.

3.12.2 The Adult Education Department is established at the same compound as the Mass Media Centre, which enables a good and effective co-operation. This Department was responsible for the Literacy Campaign which was in full swing ordered by the government and local authorities.

3.12.3 The Distance Education Division offers the following subjects:

English (Grade 9, 10, 11 and 12)
Amharic (Grade 9)
Mathematics (Grade 9, 10 and 12)
Biological Science (Grade 9, and 10)
Physical Science (Grade 9, and 10)
Pure Physics (Grade 11 and 12)
Pure Chemistry (Grade 11 and 12)

A very interesting Manual for Correspondence Course Writers has been prepared by the Course Development Panel of this Division. Because of the importance and need for information to correspondence course writers a special publication will be prepared on this topic.

3.13 Address by Mr. J. Palmer (ILO): Module Employable Skill

An ILO Paper was presented on this subject:

3.13.1 Some Aspects of Distance Education Applied to Vocational Training

INTRODUCTION

In the field of Vocational Training, the International Labour Organisation (ILO) is served by three well integrated focal points. At its Headquarters in Geneva the Training Department constitutes three Branches, one emphasising all aspects of Management Training, a second acting as an international source of information, documentation, publication and advice on Training Policy, and a third concentrating on all aspects of Vocational Training with particular emphasis on the development of vocational skills from limited initial entry levels to craftsmen and non-formal technician training programmes.

The second focal point is the International Centre for Advanced Vocational and Technical Training, which, as its name implies, offers a wide range of diversified programmes for practitioners of vocational training planning, administration, management and delivery. This paper draws heavily on experience gained in this Centre through its fifteen years of intimate personal contacts with every type of training specialist from practically every country in the world.

The third arm of the ILO in Vocational Training is its comprehensive and widely scattered programme of technical co-operation in which several thousand vocational training experts have served in over one hundred and twenty countries giving advice and assistance to countries in various stages of industrial development and who have initiated and implemented vocational training programmes of their own.

With this rich background of experience, the International Labour Organisation has encountered every type of vocational training problem, and, although solutions are not always possible, at least has arrived at certain conclusions, developed certain concepts, and chosen certain training strategies.

One such decision has been to adopt a modular approach to the solution of vocational training problems, and to vocational training systems design.

THE MODULAR APPROACH

In a paper recently prepared by the Turin Centre, "Culture, modules, and visual languaging in distance education" the modular approach is selected as being of particular interest to distance educators. In this context, a module must be clearly distinguished from a component. A module should be defined in terms of its function(s) and, more comprehensively, in terms of its function(s) of the system it supports. In educational technology a module is defined as self-contained unit of learning that performs a specific task or class of tasks in support of the major function of a learning system. This is what characterises a module in education and training:

- it is defined in terms of its function(s) and by that (those) of the learning system it supports
- it is a system in its own rights, but it becomes a module, as it transforms itself as sub-system, only upon interfacing with another module
- its objectives are sub-objectives of the system to which it belongs
- it is self-contained, i.e. it has means to attain its own objectives
- it is self-evaluative
- it has specific configuration in time, means and methods.

By contrast, a component is not a system; has objectives but not the means to attain them; does not have a built-in self-evaluating sub-system; is not self-contained.

For those who are concerned with distance education the modular approach offers three advantages. In the first place, one must devise a total communication system with its goals, resources of energy, transformation process and control mechanism. Unless this disciplined approach is taken, the sender will never be able to gurantee that and what he communicates.

In the second place, a modular approach will ensure that information is fed systematically - as well as systematically - i.e. in "digestible" units of learning, each unit having temporal as well as spatial relationships with the other units of the system. It will ensure that each module, being a system in its own rights, will reach a functional sub-objective of the macro-system.

In the third place, modules will lend themselves particularly well to imaging, inasmuch as both modules (by their limited size) and images (by the fact that they are structurally perceived and conceived and retained as whole entities) are best conceived as the combined action of all the parts on the whole form (Gestalten).

Because in the development and delivery of learning materials, the concept, the text, and the image cannot be separated, the process of analysis and systematic thinking inherent in the modular appraoch, is of itself a factor in leading both the Turin Centre and the Vocational Training Branch of the ILO in Geneva to adopt modularisation as the preferred strategy. One such strategy is exemplified by an approach to vocational training which the ILO has called "Modules of Employable Skills", and certain aspects of this approach, which is only outlined in this paper, may be of possible interest to those involved in distance education.

THE MODULE OF EMPLOYABLE SKILL CONCEPT

Thanks to its world wide network of Vocational Training projects and vocational training experts covering a variety of occupational fields, the ILO has been able to establish a number of Global Occupational Profiles. These profiles are statements about the tasks performed by workers in a given occupation. For example the Global Occupational Profile for Automechanics lists all the tasks that are commonly performed, on a world-wide basis, by people who are all called automechanics.

Such Global Occupational Profiles are cumulative, and represent the sum of all tasks within the given occupation. National Occupational Profiles are therefore likely to be based on a lesser number of tasks selected from the global profile. Furthermore specific occupational profiles which list the tasks performed by individual workers within a given employing establishment are sometimes, but not necessarily, more limited than the national profile.

Given the list of tasks within any Global Occupational Profile, the ILO has identified the task elements within each task. These task elements have been further examined to identify the cognitive (mental, affective (social, attitudinal and inter-personal), and psychomoter (manipulative) skills that have to be developed if a worker is to perform such task elements satisfactorily, and to combine his skills at the task element level into task performance skill, taking into consideration variables in task performance, variables in products, variables in processes, and variables in the materials used.

This skill analysis leads to the identification of a comprehensive description of "the body of knowledge required" for any given task and its major known variables.

The "body of knowledge required" has been further considered, but now from a pedagogical viewpoint, and within the parameters of each, the smallest components for which measurable learning objectives can be formulated, have been identified. In other words they are the smallest possible "learnable bits", limited in size only by their functional viability as significant learning elements containing a measurable learning objective expressed in behavioural terms, a progress check as a measure of the required behavioural change, and a text which takes the learner from the statement of the objective to the point of successfully responding to the measuring instrument.

Each of these Learning Elements has been produced as a small booklet, usually ranging from about six to about twenty pages. Gradually the ILO is building up a "bank" of these Learning Elements.

In carrying out its task of identifying and developing Learning Elements, the ILO has discovered that each of these Elements fall into one of three categories. In the first category fall those elements of learning which bridge the gap between minimal educational achievement levels as found in many developing countries, and the specific entry levels into different kinds of vocational training. It is the ILO's experience that seventy five percent of the potential trainable work force has had four to six years of education (primary education being to a great extent terminal education), as a result of which potential vocational trainees can read and write with limited skill in their own vernacular, can add, subtract, multiply and divide whole numbers, and can comprehend and carry out simple instructions. The ILO has been forced therefore to develop a certain number of Bridging Learning Elements, in such areas as workshop calculations, simple measurements, reading drawings and diagrams, etc. to bring the disadvantaged trainee to the point where he or she can make effective use of the more purely vocational learning material and develop occupational skills.

In the second category fall those Learning Elements which cover the development of a mainly psychomotor skill - the principal activities of a practical nature in the performance of task elements leading to task performance skills. These Activity Learning Elements normally call for the manipulation of tools (using the word in its widest sense) to create a product or render a service. Each of these Activity Learning Elements therefore contains only the essential theory, technical knowledge, applied calculations, graphic information, safety and hygiene and manipulative performance in order to carry out the activity at the standard required and under direct supervision.

As supervision is reduced, as individual responsibility is increased, so, in direct proportion, one perceives an increase in decision making on the part of the individual worker. Such decision making cannot be undertaken on the basis of the necessarily limited information given in the Activity Learning Elements. Therefore the ILO is also developing a third category of element, Supporting Learning Elements, which are generally of a theoretical nature, but which support the Activity Learning Elements, and which are designed to expand the horizon of technical competence for the individual in direct proportion to the scope of decision making expected of him.

At the point of implementation, be it a vocational training centre, or a training situation within industry, it is necessary to establish a realistic occupational profile which reflects the actual requirement of employability in a given employing establishment, within a defined employment sector, or for meeting national or international schemes of certification.

Although separated and described here in terms of three categories, it should be pointed out that the learning elements are conceived as parts of the whole, and contribute to the strength of the whole by the sum of their action upon it.

Given an occupational profile stated in terms of tasks to be performed, conditions and standards of performance (including degree of supervision and decision making), and given a profile of the target population, training specifications leading to employability can be drawn up.

On the basis of a given training specification, appropriate learning elements can be selected and consolidated into learning packages or Modular Units containing just the required "mix" of bridging, activity and supporting learning elements. Each Modular Unit will develop the correct mix of skills required to perform a properly described task, and a training programme containing the right mix of task performance skills that will lead directly to employability is known by the ILO as a Module of Employable Skill (MES).

POSSIBLE APPLICATIONS OF THE MES CONCEPT TO DISTANCE LEARNING

If distance learning incorporates individualised study by those for whom a more formal learning environment is inaccessible, then,because MES is highly individualised, limited applications must be possible.

It would seem that two types of target population can be reached. The first are those who aspire to vocational training but for whom formal schooling is no longer possible. It would seem that no special problems other than those encountered in all forms of distance learning would arise in the delivery of Bridging Learning Elements. They could be used in their present format as self-contained booklets for self learning purposes by the individual, or could form the basis of television programmes. For the less literate but still numerate population they could be produced in the form of sound/slide packets, conditioned only by the constraints outlined elsewhere in this paper. These Learning Elements are, in fact, no different from any other "academic" learning materials which have successfully been delivered at a distance and for which special delivery techniques are well established. These Bridging Learning Elements are distinguished only by the fact that they address themselves to the very particular cognitive skills that will be encountered in the course of learning practical vocational and employable activities.

The second target population type will be those who have already undertaken vocational training but whose level of skill needs to be improved, either for national economic reasons or for the fulfilment of particular employment goals. Skill improvement of this kind inevitably involves the broadening of technical horizons, of greater comprehension of the underlying causes of defects and deficiencies in the provision of services, in the making of decisions or in the creation of products. It was for this very purpose that the ILO has developed Supporting Learning Elements, and the remarks made about the delivery at distance of Bridging Learning Elements also apply in this case.

One critical factor that may inhibit the delivery of learning elements however is the lack of a suitable infrastructure to support the system. In this regard we must point out that a system is a totality of integrated components specially designed each to complement the other. A weakness in any one component must affect all the other components. Two weaknesses seem to be consistent. The first is in the provision of analytical services and the other is in feedback services.

In the MES approach the proper selection of elements, and the determination of the most appropriate mix depends on very accurate training specifications. Unless there exists a mechanism and expertise to derive such training specifications through analysis and consultation, then there is bound to be a loss in both the efficiency and the effectiveness of the training programme. As the cost of developing modular learning material tends to be high, it is only justifiable if efficiency and particularly effectiveness is kept high, certainly higher than in the case of alternative strategies. Great care must be taken to ensure that this consideration is fully met in the design of the system.

Similarly without a proper feedback mechanism no measure of the performance of the methodology is possible, and without such measures, control is not possible. As the nature and process of feedback is generally not well understood, this is likely to be a weak point in the design of the system.

Activity Learning Elements are not generally conducive to delivery at a distance. The training of "freshers" in the critical tasks of an occupation can best be undertaken within an environment which to the extent possible simulates the potential employment environment. Naturally for some occupations "learning kits" could be developed but both for the individual and for the national authority the cost and logistics involved are such that the resources would probably be more effectively used in providing residential courses. If these are of a modular nature, and if, as in the case of the MES concept, they relate directly to employability, then they can be of short duration and "sandwiched" between periods of gainful employment.

Fortunately the bulk of the target population will be found in remote areas and their greatest need will be to develop skills in the operation and maintainance of a variety of agro-mechanical aids. Here we are not involved in training people for employment. The clientele will already be employed on the land or in the forest. It will be the case of purchase or supply of tractors and ancilliary attachments, fuel driven generators, pumping equipment, mecchanical saws and other similar technological innovations designed to increase production relative to physical inputs. Given such a product, then there would seem to be no insuperable bar to the use of Activity Learning Elements, particularly where these can be supplemented by other media, and by the services of some version of the existing "extension advisors" or "agro-information officers".

CONCLUSIONS

There are potentially employable people for whom organised learning environments are inaccessible. Also facing similar circumstances are those already employed in, generally, remote places, who wish to avail themselves of new technologies. There are people who are already employed but whose skills are limited and so for whom there are economic or social constraints to individual or national progress. To a greater or lesser extent these people may potentially benefit from distance learning schemes of a vocational nature.

In the case of people who wish to develop an employable skill leading to initial or first employment, the economics and logistics of distance learning are such that viable alternatives are probable more effective and more efficient. Suggestions have been made for various forms of mobile training environments in which practical skills can be learned. A danger here is that theory or technical knowledge will be separated from practical training.

The ILO is convinced that any separation of psychomotor skill from its directly related cognitive skill not only is pedagogically detrimental but also leads directly to diminishing the development of affective skills.

In the case of people who already possess, in some form or other, however obtained, some initial skills, or who have readily to hand the necessary equipment, the operation and maintenance of which require the development of new psychomotor cognitive and affective skills, or the deepening of specific aspects of any one of the three major skill categories, distance learning using learning materials based on the ILO pattern of Modules of Employable Skill, may be a viable delivery alternative.

At first glance these conclusions, and the process of implementing them, may appear relatively simple. However the Turin Centre experience, whilst positive, nevertheless draws attention to certain psychological considerations which profoundly affect the design of the system. Here we will restrict ourselves to three factors

- cultural factors affecting communication;
- linguistic factors affecting communication;
- and visualisation factors affecting communication.

Each of these factors is more comprehensively dealt with in the Turin Centre paper "Culture, modules, and visual languaging in distance education" referred to earlier. Here we will only refer to certain highlights of what is more technically treated in that paper.

THE TURIN CENTRE EXPERIENCE

ILO's Training Centre at Turin has been faced, since its creation in 1963, with a unique communication problem: how to interact fruitfully with training directors, officers and instructors, and with administrators and managers, coming from some 161 nations and speaking at least as many languages. Currently, our residential courses are conducted in the three official languages - French, English and Spanish, although we teach also in other languages, such as Arabic, Farsi, Portuguese and Italian. When teaching in Arabic and Farsi, most of our teachers must have recourse to simultaneous or consecutive interpretation. As to the European languages, these are but second languages at best for a large number of our participants; they rarely have a full command of any but their native tongue.

Another problem is one of administrative rather than pedagogical origin. It is often difficult to programme courses in Turin for economical groups of students. Obviously, there is a certain minimum number below which the cost-per-capita becomes too high. Thus individuals and small groups tend to come in throughout the calendar year. A resource-based learning system with the attending body of tutors would seem to be the answer. Imagine, however, the size of the resource-banks and tutoring-staff if the Centre were to cater to the needs of the hundred or more nationalities studying some thirty different disciplines at the same time! Clearly, the Centre has to streamline its organisation and devise a relatively individualised system of teaching/learning if the needs of our constituency are to be met.

The dependence upon a rich pedagogical resource-bank becomes obvious, even as that on a body of highly-prepared and experienced multi-lingual tutors. Over the years, as a consequence, the Centre has studied the problem of cross-cultural communication and been concerned with distance-education. Indeed, the Turin Centre is a unique laboratory for such work. Slowly and carefully, with the assistance of people from the developing countries, it is conceiving, constructing and validating pedagogical methods and material which have cross-cultural applications.

The Turin Centre has considered the possibility of taking advantage of its specialised knowledge and experience in the development of "culture-free" instructional methodology and material, to seek applications in the field of distance-education and training. This is all the more interesting, as the Centre is strong in the area of audio-visual technology, and has distance-communication expertise on its staff. Such a step would seem to be all the more relevant, furthermore, inasmuch as distance-education is essentially individual and small-group instruction. The staggered-entry system of students' admission differs from television, radio or correspondence systems primarily in the physical distances between institution and learners. Of course, the Centre uses tutors and small-group face-to-face instruction, but so does, for example, Britain's Open University television educational system. As a matter of fact, it would not be very effective if it were not for this fundamental aspect of its pedagogical approach. All studies of distance-education bemoan the lack of effectiveness and the high drop-out rate of a great many correspondence schools and radio or television educational systems. Moreover, they definitely ascribe the main responsibility for this situation on a lack of face-to-face communication, not only between tutor and student, but among students themselves. It would seem that man is both human and gregarious, and that he cannot progress when abandoned to his own devices. We must, therefore, state this limitation to the effectiveness of distance-education, as a fundamental premise of all distance-education interventions: Whatever the pedagogical and technological approach in distance-education, there must be some opportunities for face-to-face interaction between tutor and student. Moreover, occasions for students' face-to-face encounters among themselves will greatly enhance the effectiveness of the teaching action.

There has been and there is still a constant and fast-paced evolution of the concept of individualised instruction and teaching/learning methodologies. We are getting less and less mechanistic while retaining the notion of the utilitarian finality of training. It is not easy to keep up with changes in world thinking and to contribute to this evolution. This is precisely one of the major functions of institutions such as the Turin Centre: to collect data and opinions from the field all over the world, to experiment and develop methods and software, and, finally, to build models of training systems and software and to make them available to the industrialising nations.

One solution to the dilemma of potential cultural difficulty has thus been really simple. We do not make programmes for developing countries: we only make models of programmes and train national teachers and instructors to make their own programmes, using our models for technical inspiration. Ours, therefore, is a technological contribution, not a cultural or ideological one.

Clearly, there is no such a thing as truly "culture-free" communication. Yet, consider two facts. The first one is that culture is not a prerogative of the political entities called nations. Suffice it to take any African country to to see the vast and enriching diversity of languages, customs, religions, historical backgrounds - cultures, the political leaders are faced with. Do not think, by the way, that the situation is different in, say, Europe! The northern Italian belongs to Middle-Europa, whereas the southener is closer to Africa. The Norman or Breton, of France, is physically and culturally quite different from the Mediterranean French. The Basque do not even claim genetic ties with the French or Spaniards!

We see, therefore, that, though nations have certain cultural bonds which characterise them as political entities, the cultural differences within these entities are often as great or even greater than those they have with other nations. It means that a member of a given Asian mountain tribe may not be particularly well placed to communicate with a member of the plain or maritime regions of his own country. In fact, professional and educational similarities of backgrounds are often greater communication binders than nationality. A farmer of country A is likely to communicate better with a farmer of country B than with a non-farmer of his own country.

The second fact to consider is that phsychologists have developed with a fair degree of success "culture-free" tests. CATTELL's culture-free tests of intelligence, for instance, have proved their validity on the five continents. What distinguishes these tests, by the way, is the total exclusion of writing; only drawings are used. We shall see, a little farther along this paper, what are the advantages and the limitations of this form of languaging in cross cultural communication.

We are thus led to categorising people less and less on the basis of nationality or culture and more and more on traits which they have in common because of the similarity of their life-style and learning responsibility centered in the learner. We find it more effective to divide the world into "villagers" and "city-workers", factory-hands and office-employees, adolescents and adults, literates and illiterates, than to slot them as Africans and Asians, Ugandans and Vietnamese, Swahili-speaking and Urdu-speaking. This is of course a way of looking at people which renders communication in distance-education and; particularly, in vocational and technical training, more effective. We find, by so doing, behavioral patterns which are similar within these categories and which, consequently, permit the sender to fashion his message in terms of these universal patterns of behaviour.

These findings are consistent with experience in Turin. Better "educated" (meaning with more years of formal schooling) students have greater facility with verbal material which is highly prestructured (our lessons), whereas less literate students have greater facility with non-verbal material.

VISUAL LANGUAGING

(a) - On the image

What interests us most is not really the power of television as a technological medium, but the fact that it mediates the message through the image and that, by so doing, it has proved to be all over the world the most poweful behaviour-modification instrument for all categories of people. Obviously, psychomotor skills or purely cognitive material, for example, may be better mediated through other channels. Yet, also obviously, this is not so for all categories of people.

The second observation worth considering is that the less formally educated a person, the more responsible is he to the image. The reason for this greater dependency on the image is not solely due to a lack of formal education with its emphasis on verbal learning. The rural worker, the "villager", apprehends reality in a very different way from the city-dweller who, moreover, usually possesses a higher degree of formal schooling and a greater sophistication in communication skills.

The villager apprehends reality through the senses, rather than through the congnitive process. This is precisely what makes the illiterate "primitive". "Primitiveness" is possibly the highest form of sensitivity, of fine perception of the universe. It is the sixth and seventh senses which the child and the artist - and the witch-doctor - still possess. It is, therefore, up to us, in whom this sensitivity has degenerated, to learn the language of the villager, if we are to communicate with him. Doubtlessly, we're likely to gain more from such interaction than he is.

However the villagers' strong sense of imigery may be offset by his inability to abstract. He thinks and sees life around him in strictly concrete terms. In developing learning materials we cannot assume that his process of deduction will be the same as that of the preparer of the material. He may come to the conclusions the western oriented curriculum developer assumes to be clear and "logical".

It would be a mistake if we ascribed this characteristic only to the so-called "villager". It is not so different in the child, the artist, the less-educated city-worker and the intellectually immature adult (of whom there is no shortage). The experience at Turin is that it is extant even among a great many of the students who come in with a secondary-school diploma or better. There is, in these people, an existential duality. On the one hand, they have acquired the verbal skills of industrial civilisation. On the other, they still live in the here-and-now world of the village, their real home. It is the conflict between native culture and superimposed culture. The clash between these two opposing forces is what often leads to an unconscious or sub-conscious refusal to learn, to communicate even. Again, this is not a mark of a lesser culture of a lesser intellectual or adaptive ability. It is the response to industrialisation - a process alien to the village. Let us remember, moreover, that industrial civilisation has brought upon itself many social ills, precisely because it has alienated the individual through the elimination of the "village". Many city-planners are experimenting with re-creating the village atmosphere in suburbia, because it has become evident that the village-concept is thus far the only one that permits man to build a physical and social environment to his dimension. It is up to us - again! - to recognise this situation of ambivalence on the part of the receivers of our teachings and to favour the villager didactically, because it is in this aspect of the learner's personality that reside the forces which will make him learn and reach that point of adaptation where he will survive and contribute in this technological civilisation.

(b) - On the nature of visual language

Industrially less sophisticated people have greater conceptual and manipulative facility with the image than with the verb. Words generate different "pictures" in different minds, and the picture generated will depend on the cultural and social back-ground of the reader. For some the expression "tailor-made" training programmes conjures up a picture of "specially made for me - fitting me exactly - that is good". To another it conjures up a picture of "expensive, out-of-reach, not for me - that is bad".

Visualisation on the other hand, once the ability to "read" such symbols has been developed, leads to universality, stability of meaning, and reduction of cultural misunderstandings. It would seem imperative, consequently, that communicators and particularly distance educators learn

- to communicate visually
- to use the visual language of the target-population
- to select visual languaging over verbal languaging wherever this latter is little developed, or whenever it communicates better.

(c) - On the problem of dialects

Fortunately for distance-education, its principal media - television, radio-vision and correspondence - lend themselves quite well to the use of visual language. This does not mean by any stretch of the imagination that it's a lot simpler to draw or photograph than to write or speak. Speaking in pictures is practicing a language in its own rights.

However, we're only at the beginning of knowing how to use visual communication. We're only just starting to discover its diversity, its surface and deep textures and its applications. The same is not true, of course, of verbal language about which we know a whole lot more. It is significant that Western man has seen fit to concentrate his efforts on the study and use of such a highly abstarct construct as verbal language, rather than diverting a fair share of such interest to other means of interpersonal communication.

Distance-education is still dependent primarily on the written word. We have seen that this is a great mistake in the case of, for example, less literate populations. Consider now some of the problems due to the various forms a language may take - such as dialects.

A good example is Classical Arabic.
As far as mass communication, technological concepts and terminology are concerned, Classical Arabic has limitations. It is not likely therefore to provide the means whereby cultures influence each other or to be a "popular"

means of communication. In addition, where science is involved, or where modern management techniques are to be described, the logic, form and vocabulary of Classical Arabic is unsuitable.

It was logical therefore for the Arabic language to diversify according to the local cultural and ecological influences. We find, therefore, a plethora of "dialects", classical Arabic being reserved to an élite which has little contact with the masses. A wide variety of Hamito-Semitic languages have shaped local versions of Arabic: Canaaite, Hebrew, Phoenician, Berber, Aramaic, Syriac, Nabetaean, Coptic, Dongolese, Kurdish, and of course Turkish, not to forget French, English, Italian .... and Latin.

Today, Classical Arabic is still one of the world's most ancient, rich and beautiful languages - which, once upon a time, was the richest vehicle for mathematics, astronomy and medicine. The trouble is that less than 3% of Arabs can appreciate it and communicate in it. The result of this situation is that the cinema and television, for example, use dialectal Arabic only. Since Cairo is the largest producer by far of audio-visual material, it is often the spoken Arabic of Cairo which is used, thereby exerting a strong cultural and linguistic influence on other regions.

There is little doubt but that one day the Arab nations will use a common language - both spoken and written. At best - or at worst in the eyes and ears of some! - true bilingualism will exist: the local brands of Arabic and the pan-Arabic lingua franca. This latter language is likely to be a very much simplified form of modern literary Arabic. The question now is: Can the Arab masses wait for such a distant goal before bridging the gap which exists between them and the Technological Era in which they have been violently thrown - willy-nilly? Or are there other solutions to mass communication among Arabs and between Arabs and the rest of the world?

One solution of course is to translate all communication material into the enormous range of dialects. Another is to create original material, specifically for these many target-populations. Both enterprises are fraught with economic, social, cultural and logistic problems. Two handicaps, moreover, would be common to both solutions. The first one: time - the long long time necessary to carry out such a plan (Assuming it can be planned!). The second handicap: there would be a formidable task of language education. (Let us not foreget, by the way, that languages do not exist in a cultural vacuum. The new words express new ideas, often "foreign" ideas. New ideas must be accepted affectively as well as cognitively. Any professional communicator will immediately realise the immensity of the job).

Arabic has been taken as an example of the difficulty which languages cause to the socio-economic development of countries which wish to reduce the technological gap between the industrialised and the industrialising nations. The problem is at least as complex when we deal with countries which do not possess a linguistic, literary and cultural heritage as rich as Arabic - i.e. when we deal with most of the world.

There is no magic solution to the dilemma, but there are ways in which the process of adaptation and rapid evolution to which we are all heir today can be enhanced. One of these ways is through the use of visual languages. In a paper such as this we cannot hope to cover all the factors involved in adapting modular learning material designed with certain applications in mind to other purposes such as distance learning. The reader can only refer to literature. Here we have only touched the surface, merely to focus attention on the fact that problems do exist, that the ILO has encountered these problems, and is willing to act co-operatively with those who seek to find solutions to these problems.

The Vocational Training Branch of the ILO, where the MES approach has been conceptualised and developed, and the Turin Centre, where the concept has undergone formative evaluation in a number of ways, can offer technical advisory services in the form of consultants (short term) and expertise (long term) to Governments and institutions who, through the United Nations Development Programme or various multi-bilateral arrangements, or from their own resources, can provide the necessary funding. For those institutions which meet certain criteria in the form of an established curriculum development infra-structure, and who are capable of participating in field testing activities, possibilities exist for mutual co-operative action including the supply - sometimes restricted owing to copyright considerations - of learning materials.

Provisions can also be made for Fellowship programmes either in the Turin Centre or in Geneva, or combinations of both, for the development of analytical, developmental and implementation skills for the introduction of the MES concept at a variety of points within national or in-plant training systems. The Turin Centre also offers a variety of individualised programmes in the Management of Vocational Training which, if requested, contain the development of skills needed to implement MES or other modular approaches to training, as well as training programmes covering all aspects of Vocational Training Systems Design. This also includes programmes for "Training the Trainer". These programmes, being individualised to the greatest possible extent can be adapted to include consideration of the practicalities of distance learning applied to vocational training.

The combined resources of the Vocational Training Branch with its emphasis on the research and development of vocational training methodologies and the facilities for practical applications provided by the Turin Centre, enable the ILO to offer a comprehensive Vocational Training Advisory Service.

3.14 Address by Dr. O.P. Kulshrestha (UNESCO): Technical Education through Distance Education

Dr. Kulshrestha then gave a presentation explaining the experiences with distance teaching at the Sri Lanka Technical Institute. The Institute, where technical education through distance teaching had been developed, was set up to provide higher education to people who failed to get it earlier, in mathematics, science, electrical technology, electronics and telecommunication technology. Civil and mechanical engineering courses are to be started shortly.

3.14.1 Technical Education through Distance Education - Experiences at the Sri Lanka Institute of Distance Education

A. Brief Description

The Sri Lanka Institute of Distance Education was set up in June, 1976 with the objective of providing tertiary level education in the fields of Mathematics, Science, Management and Technical Studies to those who have been unable to continue higher education in the Institutions of Higher Learning due to socio-economic and other reasons.

The Institution now provides 5 courses of study involving 4,892 students (in all three media) the details of which are indicated below:

	Males	Females	Total	No. Employed
Management 1st year	761	165	926	100%
Management 2nd year	298	232	530	15%
Mathematics 1st year	503	242	745	70%
Mathematics 2nd year	329	145	474	55%
Science	112	149	261	60%
Electronic Technology	872	123	995	52%
Electronics and Telecommunication	886	73	961	60%
	3763	1129	4892	

Objectives of each course of study:

(i) Higher National Diploma in Management Studies

a. To provide qualified personnel for middle management positions.

b. To train personnel to start and run efficiently small industrial/agricultural units (with State assistance wherever possible)

(ii) National Diploma in Science

(iii) National Diploma in Mathematics

These two courses have been provided as an alternate path to pursue higher studies in the areas of Science and Mathematics. Since there is an acute shortage of Science/Mathematic teachers the course content is teacher oriented.

(iv) Technological Courses

Higher National Diploma in Technology:
(Electrical Technology and Electronics and Telecommunication Technology)

a. To provide technical education and training facilities leading to NPQE level (non-professionally qualified Engineers) for those engaged in work of a technical nature.

b. To provide a unified system of internal promotional/efficiency bar examinations for various Technical Departments/Corporations.

In addition, two additional technological courses of study in the areas of Civil and Mechanical Technology are scheduled to be started w.e.f. November, 1979. A special course in Electrical Technology for the benefit of the employees of the Ceylon Electricity Board is also scheduled to commence in November, 1979.

Admissions

Since the applications for admission exceeds the number of places available (11,000 applications in 1976 and 16,000 applications in 1977) quotas are fixed for employed and unemployed categories. Merit is the criteria for selection within each category.

Teaching

The methodology adopted is as follows:

(i) Lesson material prepared and edited by University Staff, is sent by post at regular intervals.

(ii) Regular assignments based on lesson material are sent to students. These are evaluated and individual guidance given through marking and comments on each script.

(iii) Model answers are sent to students along with the marked assignments.

(iv) Face-to-face teaching is arranged once or twice a month at the 12 Regional Study Centres in Technical Institutes.

(v) Seminars

(vi) Short periods of concentrated practicals / training at university laboratories / Technical Institutes. Nine Science Laboratories are being constructed to facilitate the conduct of science practicals. 18 workshops are also being constructed to conduct workshop practicals.

(vii) Library facilities are available at the Institutes Headquarters and at Regional Study Centres.

(viii) Use of pre-recorded cassettes, films and slides at selected Regional Centres has been started recently.

Counselling

Counselling is done at the 12 Regional Study Centres. A separate file is maintained for each student. The students' progress is monitored and advice given whenever necessary.

B. Salient Features of Technical Courses

The finalization of the technical courses took considerable time and effort. A committee was appointed by the Ministry of Education to identify the technical courses which should be started on a distance education basis. After the identification of the technical courses, four sub-committees were appointed to finalize the syllabi and the structure of the courses. The main committee thereafter adopted a uniform structure for all technical courses. This is given on page 2 of the Institute's prospectus on technical courses. The committee submitted its report after about 10 months of deliberations. It took another 9 months to start the first two technical courses.

The main feature of the structure of these technical courses is that a worker in a technical department or industry, who does not have even G.C.E. - "O" level (General Certificate of Education - Ordinary level) qualification (equivalent to 10th Standard) can hope to reach the level of the so-called "N.P.Q.E." (non-professionally qualified engineer) in a minimum period of 8 years. Further the technical courses have been developed with the active co-operation of the various technical organisations in the country with the understanding that when their employees complete successfully any one stage of the structure they become eligible for promotion, thereby replacing the examination for internal promotions in these organisations.

The present requirement for entry to the technical courses is that the student must have completed the G.C.E. - "O" level with passes in specified subjects. A foundation course is under preparation and is scheduled to be started in January 1980 for these students, who do not possess the "O" level qualifications.

The fact, that the certificates given by the Institute make the students eligible for promotions in their respective fields at each stage of the course structure, has given these technical courses tremendous usefulness, prestige and acceptability. Both the employers and the students know the level they will achieve at each stage of the course.

The courses are prepared and written under the overall guidance of a "National Consultant", who is usually a Head of the Department or Professor or equivalent in a University and who helps the Institute on a part time basis devoting half a day per week in the Institute's premises and the equivalent of one day at his residence. Nearly all the writers and editors are external staff on contract. Most of the translators, assignment examiners and tutors are also external.

C. Practical Component

At present the students of the technical courses devote a little more than 10 per cent of their time on practicals and face-to-face teaching. It has been realized that this will have to be increased to about 20 per cent in order to enable to cover the practical aspect of the course to an acceptable level.

The Institute is developing workshops at all regional Centres. At three selected Regional Centres, four times larger workshops and laboratory facilities would be made available as compared to other Regional Centres. The students will be required to do the practical work for a period of 3 - 4 weeks to cover up this aspect of the course. In the first year of the course they are given demonstrations at anyone of the Regional Centres.

The element of the practical work has been broken down into the following four categories:

(i) practical work, which the student must do individually or in a group,

(ii) practical work, which can be shown as demonstration to the students,

(iii) practical work, for which films and slides can be shown,

(iv) Practical work, which the student is supposed to learn at the place of his work.

This decision is taken by a team of writers and editors related to the course and the staff of the Institute under the guidance of the "National Consultant". Our experience shows that taking such decision is quite complex.

D. Cost Consideration

The cost of technical education through the techniques of Distance Education is high. In our experience it is 4 - 5 times as expensive as general education at the same level. Maintenance and operation of workshops and laboratories is the major factor. Increased proportion of face-to-face teaching is the other main reason.

Technical education by traditional methods is also 4 to 5 times more costly than the general educaiton. The cost effectiveness of the techniques of distance education is, in our experience, only slightly lower in the case of technical education than in the case of general education. However this conclusion is very much dependent upon the decisions taken in respect of the element of practical work.

E. Distance Education and level of Technical Education

We considered the application of the techniques of distance education for the following three levels of technical education:

(i) Engineering level (leading to first degree)
(ii) Technical level
(iii) Vocational level

The Engineering level was excluded because of the small number of students involved in each branch of Engineering. For the same reasons capital investment in equipment in workshops and laboratories could not be justified.

The vocational level had no such problem of numbers. However, in Sri Lanka, it is needed by those who are not employed; consequently it was decided that vocational training may continue to be given by traditional full time courses. It is likely that in certain fields of vocational education the techniques of distance education will be adopted.

In the case of technical education at technician level we found the following favourable factors:

(i) the number of students is large enough;
(ii) there is sufficient element of theory, which can be effectively taught by the techniques of distance education
(iii) there is not unduly large amount of practical work involve
(iv) the element of practical work reduces further, if the student intake is from among persons working in technical organizations;
(v) the students are likely to be highly motivated, if the completion of such courses may help in their promotion.

Besides the above considerations we found that both the employers and the workers-unions were in favour of courses at this level and are willing to co-operate for the success of such courses.

The co-operation of employing organizations is very valuable, as, in some cases, it reduces the element of practical work to the extent it can be learnt within the set up of the employing organisations. The writers and editors can also be found from the employing organisations and once these organisations are actively involved, their support in many other ways becomes available.

F. Conclusions

According to our experience the following points seem to be important:

(i) Application of the techniques of distance education is relatively more suited to the middle level technical education, i.e. Technician education.

(ii) The student should preferably be employed in work of a technical nature connected with their field of study.

(iii) The element of face-to-face teaching has to be relatively larger in such case.

(iv) The planning of technical courses by distance education needs relatively more thorough initial preparation.

(v) The crucial decisions are as to how much and how the practical work will be done by the students.

(vi) The cost of technical education by distance education is likely to be about 4 times higher than that for general education.

(vii) The relative cost-effectiveness of distance education is nearly the same for technical education as for general education.

3.15 Distance Education in Zambia

A Zambian team discussed distance education in their country in a panel meeting in plenary session. The panel consisted of:

Moderator : -Dr. B. Oguntonade, Nigeria
Members : -Dr. M.M. Kaunda, University of Zambia
-Mr. T.H.B. Miyanda, National Correspondence College,
-Dr. S.D. Ndlovu, University of Zambia
-Dr. P.A. Mwaipaya, University of Zamb
-Mr. D.N.Okunga, University of Zambia

3.15.1 The National Correspondence College

Mr. Miyanda of the National Correspondence College (NCC) opened the presentation by describing the work of this institution. The NCC's foundation in the immediate post-independence period could be seen in the context in which only 2% of the population had any form of secondary schooling. Starting on a small scale with about 250 students mainly adults in gainful employment taking courses in Mathematics, English, History, Geography, Health Sciences and Civics, the NCC had expanded to offer General Certificate of Education (GCE) "O" level subjects in 1967, and now has some 33,000 students, This could be divided into three groups:

(a) referred students: that it, those who have failed some of their subjects in their secondary school exams and who are referred to the NCC to take these subjects prior to matriculation;

(b) adult students studying at junior school level or GCE "O level, on an individual basis;

(c) juveniles for whom secondary school places are not available, and who therefore enter to NCC's supervised study programmes.

In addition, the NCC's courses are supplied to class teachers on request for use in conventional schools. The

NCC has 167 local centres. The college sends study materials to the centres together with a student study time-table. Each local centre has a supervisor who distributes materials to students. The task of the supervisor is to look after disciples in the centres; to prepare termly reports and to maintain a record of students' grades. Students' work is sent to the NCC for evaluation.

Dr. Ndlovu introduced two papers. In the first paper he stressed the need for systematic needs assessment to underpin the development of distance teaching institutions, and the formulation of their objectives. He stated that well formulated objectives were a sine qua non for evaluation, since only thus could one judge whether an institution was attaining its purpose. The need for formative evaluation aimed at institutional improvement was stressed as proves the paper, which we publish here below:

3.15.2. Principles for the Development and Evaluation of a Distance Teaching University: A Guide for Developing Nations

Introduction

It is generally accepted that developing nations require more educational facilities, resources, new instructional techniques and manpower.

It has been possible for some developing countries to invest large sums of money in the visible prestigeous non-educational projects. Developed nations have managed to reach the moon and other planets, and have the capability to view the whole world by satellite or other sophisticated forms.

The greatest dilema is that it has not been possible for these nations to reach the masses educationally nor to invest more in the invisible but intrinsic learning processes for the masses. Isn't it ironic that while it is quicker to reach the most distant parts of the world and of the Universe, it is still harder to reach the minds of the learners next door or in rural areas.

It is nevertheless heartening to see the United Nations Economic Commission for Africa, in collaboration with the German Foundation and the African Association for Correspondence Education take an active role in trying to find solutions to this unfortunate discrepancy in the transmital of knowledge and skills to distant learners by convening this International Seminar on Distance Education here in Addis Ababa. Also the work of the International Council on Correspondence Education at the last Conference in Delhi (1978), UNESCO's efforts are signs of the growing awareness of the constant outcry and quest for knowledge from the masses deprived of access to formal education.

We should consider a proclamation of the International Year of Distance Education, since the Universal declaration of Human Rights proclaimed the inherent right of every one to Education.

For the purpose of this International Seminar, this paper shall be confined to the principles for the development and evaluation of a distance education university and will suggest some models for developing nations:

Definition of Terms:

To help us understand the context in which certain words and phrases are used in this paper the following definition of terms is provided.

(a) Principles: Principles are certain truths or theories on the basis of which relevant related predictions can be made.

(b) Program evaluation: means a determination of the worth or adequacy of an institution or educational programme Glass,(1974) can be made. Scholars in the field of evaluation Ralph Tyler (1950), James Popham (1976), Michael Scriven (1967), David Krawthwohl, Benjamin Bloom and Bertram Masia (1965), look at evaluation in terms of objectives. As Robert Stake (1973) stated "they have a 'preordinate' approach in that they require a pre-specification of objectives. In this sense, evaluation seeks to determine if the stated objectives have or have not been met.

(c) Distance education: It means a non-contiguos form of education. It is the opposite of classroom education Börje Holberg (1979).

Distance education utilizes non face-to-face communication media between the instructor and the distant learner. It simply means teaching from a distance. In Germany it is called, "Fernstudium". Distance education is also referred by several other names as Open Education, SUN, University of Mid America (1978), Independent Study, non-traditional study, Envelop Campus, Open University, University Without Walls, External Degree, and I can only add that Distance Education is a Community Campus or a people's campus.

(d) University: It implies Universality in pedagogical quality; that is, excellency in teaching, research and community service.

(e) Needs Assessment: According to Malcom Provus, need is the discrepancy between the desired situation and the actual one. Needs assessment is therefore a way of determining the lack of what is desirable or what should be.

(f) Planning: Planning is a rational application of knowledge in the systematic analysis of various educational program requirements and giving the program direction.

After giving the above definitions, I would now like to come to the main issues involved in the development and evaluation of a distance education University.

THE PRINCIPLE OF PLANNING

The success of any programme depends on systematic careful planning, availability of resources and manpower. Various activities are carried out in relation to planning. Planning for a distance education University should start with:

(a) Needs Assessment

Need can be viewed in two ways: from official government policy and from the people themselves. Government may view needs from the nation development point of view, whereas people may view need from their individual development such as professional enrichment.

In some developed countires, studies for instituting open learning have been carried. Dennis Gooler, G. Roger Sell, and David Forman (1975). Even in developing countries where it is taken for granted that there is a need for distance education, it is necessary to conduct needs assessment to determine the kind of educational programmes people need and want, demographic data, size of population to be served, educational levels, geographic distribution, cultural background, and radio and T.V. reception. This information will be useful for deciding on the kind of educational programmes to be developed and in selecting appropriate instructional media.

(b) The Planning Process

The Planning Process should then look at the needed facilities. What kind of educational facilities are needed,(UNESCO, architecture and Educational Space, 1972).

(c) Resources

An assessment of the required resources to institute a distance education university should be made eg. the physical resources--library, teaching materials, printing machinery, ect., and human resources eg. professional teaching--curriculum developers and evaluation specialists. Mass media and instructional technology personnel, and administrative staff.

(d) Budgeting

The most efficient way to budget for a complex distance education system is to utilize the information on facilities and resources required and determine capital expenditure, staff salaries and gratuities, lecture resources, stationery, mailing, instructional technological equipment, and consumables. A further look into the continuing budget, contingencies, and possible expansion needs should be made. A long term budget such as a five year one along the lines of Policy Programming Budget System (PPBS) would be useful in this venture.

Distance Education Development

Developing a distance education university requires a more thorough consideration of some of the important educational factors concerning distance education institutional building.

These factors are:

a. The university system should be capable of reaching out to the students. The system cannot operate if instituted only for political consideration rather than for the actual need and presence of learners to be served. Instructional communication such as written lectures, radio, T.V., audio and/or audio visual cassetts should be used if feasible.

b. Greater emphasis should be placed on the distant learner whose needs are different from the full-time student in a formal education system. The distance education system should utilize the concepts recommended for non-traditional study. These concepts stress the needs of the learner over the convenience of the institution and encourages relating content to be learned to the life experiences of the learner. Commission on non-traditional study (1973).

c. The system should have faculty with more time to devote to distance teaching. It has been demonstrated in most universitites which utilize full-time teaching faculty that there is a frequent conflict of interest. The full-time teaching staff tend to devote more time to full time students than to correspondence students. University of Zambia (1979).

d. There should be a wide choice of courses for distance learners Wedemeyer (1973).

e. The instructional methods should meet the needs of diverse types of students.

MODELS FOR DISTANCE EDUCATION

1. Administrative Model

An administrative model is the one based in a formal teaching university and serves as a purely administrative unit or a facilitator of the instructional program using faculty who teach full time at the formal university. These faculty are usually very few and are over worked in the preperation of lecture materials. University of Zambia (1978).

This model could be a money and time saver in starting a distance education programme if faculty are available but may have problems when faculty involved are not fully committed. Since developing nations have an acute shortage of staff in their universities, programs may not be as diversified as when distance education has its own full-time faculty.

2. Combined Adminstrative and Teaching Model

This model provides for full-time teaching faculty for distance teaching who constitute course writing teams and tutors in various parts of the country to assist the students. The Administration serves the staff and students by providing the required resources and production of reading materials, research and evaluation expertise.

3. Teacher Manager Model

W. J. K. Davies (1978) describes a teacher manager process not necessarily for distance education. It is nevertheless worthwhile to look at the model in terms of its possible feasibility for the distance educational development.

The process is given as follows:

Organization: The teacher does the following:

1.1 Establishes purposes, type and content of course
1.2 Establishes student characteristics
1.3 Establishes learning criteria
1.4 Identifies resource constraints factors
1.5 Identifies most viable teaching/learning methods
1.6 Uses above factors to plan work

Implements:

2.1 Physically organizes available resources

2.2 Produces necessary items

2.3 Teaches and guides student learning

2.4 Monitors student activities

2.5 Assesses success of the learning

Evaluates:

3.1 Uses results of 2.4; 215 to define any problems

3.2 Establishes from 3.1 the need for, types and problems of implementing any modifications

Validates:

4.1 Uses information from 2.4; 2.5; 3.2 to help bring his courses and/or materials to a predetermined standard.

The above model seems likely to require the teacher to spend a lot of time in administrative or organizational matters and this impinges on curriculum development and course writing. There is need for the teacher to share responsibility in distance teaching with other professionals in the field and need for the academic administrators with the interest and expertise in distance education to be distance education managers and advocates for the distant learners.

4. Semi-Administrative Model

This model is not solely administrative but has a small teaching staff of its own while also depending on teaching staff from the formal university system. This serves as an enriching mutual academic relationship between the distance education programme and the formal teaching university and serves to remove any biases of inferiroity or superiority of one course over another.

FEASIBLE MODEL FOR A DEVELOPING COUNTRY

Since there is no one best way in the establishment of distance educational programmes, only a recommendation for consideration can be made here.

Models 2 and 4 could be considered as they provide for the utilization of full-time teaching staff and some form of relationship with the already existing educational institutions. There is need for institutional collaboration but without losing priorities for the distant learners. This collaboration also helps sensetise the University to the needs of the community and removes the elitist approach to education from ivory tower academicians.

EVALUATION

Evaluation specialist have been mainly concerned with formal education programs. Of late, attention has been directed to distance education Gooler (1979), Ndlovu (1978). Evaluation is the determination of the worth of a programme. Evaluation also serves as a policy guide, it further determines the extent to which objectives have been met.

The distance education university should therefore have a clearly stated mission and rationale on the basis of which specific objectives are developed. There should be standards set on the basis of which the fulfillment of objectives can be judged.

Evaluation can be "formative", that is, while the educational programme is still going on, it can be "summative", which means that it is undertaken after the distance teaching programme has been completed Michael Scriven (1967). A formative evaluation's audience can be both the teachers and policy makers. It is useful in that mistakes and efficiency problems can be pin-poihted and rectified before it is too late.

THINGS TO BE LOOKED INTO BY THE EVALUATORS

The evaluator's purpose should be to contribute towards serving the institution if feasible or serve the nation from greater financial disaster if evidence show worthlessness of the programme. The evaluator should not be threatening but an interested part of distance education and should make every effort in creating rapport with the institutional staff. Edward F. Kelly (1971).

Evaluation can be an internal institutional activity or an outside commissioned activity. An outside group tends to have a different audience from that of the internal formative evaluators.

The evaluator should look into the following aspects of a distance education institution:

1. Rationale
2. Stated intents or objectives. Robert Stake (1967).
3. Students antecedents--their characteristics

4. Programme Antecedents--background to the programme
5. Instructional objects and standards
6. Curriculum as it relates to programme intents
7. Teaching or instructional media for the distant learner in relation to instructional objectives
8. The impact of instructional technology on learning behaviors of students. To what extent are motivation efforts made for the learners? John Keller, (19[illegible]9)
9. Administrative activities in relation to the programme rationale
10. Availability of resources
11. Facilities provided in relation to what was planned--To what extent are the facilities adequate?
12. Programme output--Have the outputs of the program gained anything from it? To what extent have they attained the cognitive, affective, and psychomotor domains of learning? S.D. Ndlovu(1974). To what extent are the learned skills being applied to work experience and problem solving in the community?

Evaluation is a complicated business that needs resourcefulness in the development of evaluation instruments.

SUMMARY

The principles for the development and evaluation of a distance education university presented here are not exhaustive but give us a broad look into the issues involved. These principles are concerned with the various aspects of planning such as needs assessment, facilities, resources, staffing and budgeting. Emphasis on the development of distance education has been laid on system capability in resources, curriculum for the the distant learner and full-time faculty.

Various models of distance education university have been presented. Evaluation is regarded as an important part of distance educational development as it helps in the determination of the worth or adequacy of the programme for the purpose of improvement. Various aspects of evaluation have been provided.

CONCLUSION

It is therefore evident that in order to develop a viable distance education university in a developing country there is need for systematic planning and program evaluation. A distance education university should be self-sufficient as much as possible so as not to lose its priorities for the distant learner. Indeed, it should be a community university to serve the people and to contribute to national development.

If distance education has to succeed in developing nations, there is great need for a greater allocation of financial, physical and human resources to this form of education more than before. There is need for the improvement of communications, such as postal services, radio and T.V. transmitters.

Regional and international collaboration would also be helpful in the facilitation of distance education.

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3.15.3. Development and Administration of Distance Education: The University of Zambia Experience

Educational development and innovation have been a concern of several developing countries for a long time. There has been an increase in the people's quest for knowledge for the purpose of self-improvement, self-reliance and national development. In most cases the increase in the educational demands has not been met due to limited financial resources, facilities and manpower.

The development of the Zambian Educational system that focused on the unmet needs of people due to colonial rule, was greatly influenced by His Excellency Dr. Kenneth Kaunda, the President of Zambia.

The University of Zambia was established by the University of Zambia Act No.66 of 1965. Its operation was based on the Lockwood Report issued in 1963 just before Independence.

The Lockwood Report provided for the incorporation of a Correspondence Studies Department into the University functions. The University's teaching and research functions would cater to the few students who could manage to find space and whose family and employment circumstances permitted. A great number of mature students who by no fault of theirs could not qualify to enter the Unviersity on the basis of the high level High School criteria would be left by the new "University bus".

The university therefore provided for a mature age entry category for some students both to full time and to Correspondence Studies. This development was in keeping with Dr. Kaunda's directive when officially opening the University of Zambia he said:

> There is one constant danger I have observed facing this young country of ours. This is a tendency to keep to the beaten track. We must be original - - - just because the system is there does not mean that it is good. It may have been appropriate in the past. It may still be the suitable system in some other country. But the real test is whether it is the best system for Zambia - - - -. We must be courageous in breaking with the outmoded traditions and determined in our efforts to explore new paths into the future.

The role of the University of Zambia has therefore been to face the realities of the needs of the people in relation to the National development needs. One of the ways that the University showed responsiveness to the people's educational needs was to develop and provide distance education. There are several other programmes which were developed such as the extra Mural Studies which now come under the University Extension and Conference Unit. The University has resident tutors based in the community in the nine provinces of Zambia.

The Department of Correspondence Studies was based on the Australian University of New England model.

ADMINISTRATIVE PROCEDURES FOR CORRESPONDENCE INSTRUCTION

The University Schools that offer correspondence courses so far are:

1. School of Humanities and Social Sciences (HSS)

   B.A. with majors in any of the following:

   a) Public Administration
   b) Economics
   c) Sociology
   d) African Development Studies
   e) Philosophy
   f) Social Work
   g) Geography

2. School of Education

   (i) B.A. (Education)

   (ii) B.Sc. (Education) for Science Teachers

   with majors in any of the following:

   a) English
   b) Literature
   c) History
   d) Geography

3. School of Natural Sciences

   B.Sc.

   Offers course in Mathematics mainly for degree requirements in the School of Education and HSS. Teaching staff shortages and financial constraints led to the withdrawal of teaching Chemistry, Biology, Zoology, and physics through correspondence.

4. Centre for Continuing Education - Department of Adult Education and Inservice Training

   Diploma in Adult Education (DAE)

5. School of Law (LLB.)

The Department of Correspondence Studies is a facilitator of the instructional process for the distant learners. The department is an advocate for distance pedagogical innovations; and an evaluation and needs assessment unit.

The Correspondence Teaching staff are the same staff teaching full time internal students. The Deans, the Director of the Center for Continuing Education, the teaching Department Heads, and the Head of Correspondence Studies are jointly concerned with correspondence teaching.

Correspondence teaching is a systematic long process that requires a clear understanding and commitment to the needs of the distant learner.

Correspondence Teaching Process

1. The Department of Correspondence Studies prepares the Handbook, Guides to Correspondence teaching, and a "How to Study" guide for students.
2. Deans appoint lecturers to teach correspondence courses.
3. Lecturers' names and courses to be taught are sent to the Head of Correspondence Studies.
4. The Head of Correspondence Studies welcomes the teaching staff and introduces course advisers to the new staff and sends to them:
    a) Correspondence Studies Handbook
    b) Guide to the Writing of Correspondence Courses

The Department arranges orientation for new faculty and makes a schedule for lecture materials production and dispatch to students and deposit slip for lecturers to fill out indicating the number of lecture materials being submitted to the Department each time. Arranges individual meetings with faculty who may need help.

ADMISSION AND COURSE ENROLLMENT PROCESS

1. At the beginning of the academic year, students apply for admission at the University of Zambia.
2. Senate Admissions Committee (in which Head of Correspondence Studies and Director of the Centre for Continuing Education, and Deans of various teaching schools are members) meets to select qualifying candidates. School Deans are required to make initial selections and to bring their recommendations for admission to the Committee. The Office of Admissions informs accepted students of their admission to study through correspondence and sends their names to the Department of Correspondence Studies and the teaching schools.
3. The Department of Correspondence Studies opens files for each of the admitted students, allocating a computer number.
4. The Department's Handbook describing courses and degrees offered and policies governing Correspondence Studies, course enrollment forms in duplicate, a "How to Study" guide, a letter of welcome, and a statement of fees are sent to the admitted student.
5. During a specified period, course enrollment forms are received from students showing courses selected, degree and major chosen.
6. After careful evaluation the Department Head tentatively signs the course enrollment approval for all the students and sends the forms to the respective Deans of the degree granting schools for final approval.

7. Respective Deans complete course enrollment evaluation. If concurring with the Head of Corresspondence, sign the forms. If not, suggest alternative courses. Return forms to Department sending one copy to the Computer Centre for student data central record.
8. Department of Correspondence Studies officially informs all students of the approval of their course enrollments and the Head assigns Course Advisers to the students.
9. Course Advisers contact their respective students and work out their degree programme requirements in collaboration with the teaching Department Heads and faculty.

PROCESS OF LECTURE MATERIALS PRODUCTION AND DISPATCH TO STUDENTS

A. The Department requires that every lecture for the distant learner be prepared in an understandable manner. The course should have an introduction, clearly specified objectives, rationale and method of evaluation.

The following is an example of one of the actual lecture outlines for a course offered in the 1979-80 academic year:

ADULT EDUCATION 214

METHODS IN VOCATIONAL-TECHNICAL EDUCATION

Structure
AE 214 is a one-term course with four contact hours per week. It is one of the core courses for the Instructional Design and Development Specialization of the DAE Programme. It may also be taken as an option by students in other specialization areas.

General Aim and Rationale
The course deals specifically with methods appropriate for use in teaching vocational or technical subjects. The emphasis is on psychomotor or skill-learning and the appropriate ways in which this type of learning can be facilitated. The course equips participants with the necessary skills for designing or teaching technical or vocational subject matter.

Specific Objectives

Upon completion of the course, participants should be able to demonstrate mastery of the following objectives:

1. Without using any references, the participant will be able to differentiate in writing between the general aims of vocational education and those of academic education. Participants must accurately describe the differing aims of the two types of education and explain the implicatons of these aims.
2. Given examples of cognitive, psychomotor, and affective learning outcomes, the participant will be able to correctly identify each example. 100% accuracy required.
3. Given all the necessary information about an instructional situation involving psychomotor learning, the participant will be able to formulate a psychomotor objective appropriate for the given situation. The objective must include a statement of the conditions under which the learning will be assessed, the precise performance required of the learners, and the criterion of acceptability of the performance. Each of these parts must be appropriate for the given situation.
4. Without using any references, the participant will be able to explain in writing the general implications of psychomotor learning for instruction. Explanations must include discussion of the role of media, practice, supervision, and feedback in instruction for psychomotor learning.
5. Given access to a variety of resources, the participant will be able to design and demonstrate the use of the following instructional strategies: planned demonstrations, job aides, project grouping, and models/mock-ups. Design and demonstration must be judged as acceptable by the instructor.
6. Without using any references, the participant will be able to explain the conditions under which the following instructional strategies can be used: job simulations, on-the-job training, and site observations. Participants' explanations should include a description of the strategy, the planning and management required by the strategy, and the kinds of learning situations for which the strategy is appropriate.
7. Given a series of psychomotor objectives, the participant will be able to develop checklists and rating scales for performance tests over those objectives. Checklists and rating scales must be rated as acceptable or better by the instructor.

Content Outline

AE 214 covers the following major topics:

I. The Vocational-Technical Setting
    A. General aims and their implications
        1. Occupational training
        2. Job competence
    B. Learning outcomes in vocational-technical education
        1. Cognitive, psychomotor, and affective learning
        2. Nature of psychomotor learning and its prominence in vocational-technical education
        3. Specifying psychomotor objectives

II. Implications for Instruction of Psychomotor Learning
    A. Media requirements
    B. Practice
    C. Supervision and feedback
III. Instructional Techniques for psychomotor Learning
    A. Planned demonstrations
    B. Job simulations
    C. Use of models/mock-ups
    D. Project grouping
    E. Job aides
    F. On-the-job training
    G. Site observations and field visits
IV. Assessing Psychomotor Learning
    A. Performance Testing
    B. Performance rating methods
        1. Checklists
        2. Rating scales

Methods and Procedures

The course will emphasize practice and application of the ideas presented in class. Handouts and class discussions, demonstrations and simulations will be the major methods utilized in the course. Participants will be involved in practice and critique of instructional techniques. To the extent possible, learning activities will be individualized to meet the varying needs of participants.

Assessment

Tests will be given to assess mastery of the specific objectives. Test results will be averaged to arrive at a course grade. There will be no final examination.

References

Handouts and required readings will constiute the major resources for participants. Reading assignments from the following books will be given:

Butler, F.C. Instructional Systems Development for Vocational and Technical Training. Englewood Cliffs, N.Y.: Educational Technology Publications, Inc., 1972.

Davies, I.K. Competency-Based Learning: Technology, Management, and Design. New York: McGraw-Hill, 1973.

Gagne, R.M. The Conditions of Learning, third edition. New York: Holt, Rinehart, and Winston, 1977.

Harrington, C.T. and B.F. Johnson. Delivering Competency-Based Vocational Education. Tallahassee, Florida: Career Education Centre, Florida State University, 1976.

Nystrom, D.C., et al. Instructional Methods in Occupational Education. Indianapolis, Indiana: Bobbs-Merrill, 1977.

UNITS INVOLVED WITH LECTURE MATERIALS PROCESSING

1. Lecture Materials Unit

The Lecture Materials Unit has a Senior Administrative Officer and supporting staff. All lecture materials come in hand written form with a deposit slip in duplicate showing the name of the lecturer, number and title of the course, and the complete course content of each lecture material.

The Lecture Materials Unit assigns a course serial number to each lecture material and enters all the submitted materials in the intake register showing the date received and the lecturers get their copies of the deposit slips.

The lecture materials are then sent to the typing pool for typing indicating the date sent in the lecture materials register.

2. The Typing Pool

The typing pool has a supervisor and 8 copy typists. The supervisor is answerable to the Head of Correspondence Studies. He records all the incoming lecture materials and assigns a typist for each material.

When typing is completed, the lecture materials are signed out to the Lecture Materials Unit which in turn signs them in.

3. Proof Readers

The Department has proof readers who receive all typed lecture materials from the Lecture Materials Unit. After proof reading the lecture materials are returned to the Lecture Materials Unit.

4. University Printing Center which is known as the Material Resources Center.

The Material Resource Center has a Director and is not under the

Department of Correspondence Studies but has priority commitment to Correspondence Studies materials due to the urgency required for the dispatch of Lecture Materials. After production the printed materials are returned to the Lecture Materials Unit.

5. Duplication Room - Back-up Room

The Department has a duplicator and duplicator operators directly under its control for the purpose of producing urgent circulars and to serve as a back up system in case of the break down of the machinery in the Material Resources Centre. Whereas the internal students have an advantage of classroom lectures the correspondent students depend on the written lectures and hence they have to receive their lecture materials on time to be able to prepare for their examination.

6. The Registry

The Department has a Registry with a Senior Administrative officer and supporting staff.

The Registry centralizes all students and lecturing staff records. It is also a mailing room utilizing an addressograph and a franking machine.

When lecture materials are put in envelopes for students by the Lecture Materials Unit, they are brought to the Registry for mailing to students.

CONTINUOUS ASSESSMENT AS A MEASURE FOR STUDENT LEARNING

Because the Correspondent Student is at a distance from the lecturers, the way we can tell whether he/she is learning anything is through assignments for continuous assessment during the year. In most cases continuous assessment accounts for 50% of the final grade. The Correspondent Students write the same final examination as the internal full time students.

The completed assignments are returned to the lecturers through the Department Registry which records them in the Continuous Assessment Register and after marking the lecturers return them to the Registry for grade recording and returning to the students. The lecturers also keep their student class cards where they record the grades.

RESIDENTIAL SCHOOL

Each academic year during the first term, all correspondence students are required to come on campus for face to face instructional contact with their lecturers for two to three weeks. The Residential School is held during the holidays for internal students so as to have dormitory and classroom factilities and of course to have the free lecturers. Lecturers who remain on campus to teach Correspondence Students during Residential School are given compensatory time off during the term per arrangement with their Deans.

COURSE ADVISING and STUDENT COUNSELLING

The Department has two Course Advisers whose job is to assist the Correspondence Students in their problems relating to course work, and other problems that may impinge on the students' studies, such as employment and/or family problems. The course advisors also act as the objective analysts and help towards fair decisions on students' withdrawals and lateness in the submission of assignments.

Course Advisors further conduct research on students so as to find out more about the nature of their problems in relation to study and assignment writing, attending the Residential School and attrition.

FINAL EXAMINATIONS

Correspondence Students write the same final exams as the internal full time students. They write their exams at the designated various centres nearer to where they stay and others choose to come to the main campus.

Before examinations each lecturer is required to certify to the Head of Correspondence that each of his students has fulfilled the course continuous assessment and is ready to write the final exams.

During the term the Department monitors the lecture materials progress and continuous assessments to make sure that students are doing their work and that the lecturers are also doing their work in the interest of the distant learners.

RESIDENT TUTORS

The University of Zambia Centre for Continuing Education has offices in the nine Provinces of Zambia under the Extension and Conference Unit (formerly Extra Mural Studies Department). The main work done by Resident Tutors is to organize classes and seminars for the communities in their area.

The Resident Tutors work in relation to Correspondence Students involves on the spot advising on administrative matters and communications with the Main Campus. They also act as invigilators at the time of final examinations.

TRANSFER TO FULL TIME AND/OR TO PART TIME

The University of Zambia undergraduate degree is a four year program requiring sixteen courses. Correspondence Students take only two courses each year or three courses if they obtain B grades for the preceding year. It, therefore, would take them approximately eight years to graduate if they successfully complete their courses each year.

Students often prefer to transfer to full time in order to expedite their degree completion. Students who are teachers under the Ministry of Education are given a two-year paid study leave so as to transfer to full-time to complete their degree programmers. Some students request transfer from correspondence to part-time.

TRANSFER FROM FULL TIME TO CORRESPONDENCE STÜDIES:

Some of the students' circumstances change during the course of their full time study and they request for transfer to correspondence and/or to part-time study. Each request is taken individually and treated on its own merit.

USE OF THE MASS COMMUNICATIONS DEPT. RADIO PROGRAMS

This department is also part of the Center for Continuing Education. The Correspondence Studies Department has proposed the introduction of Radio broadcasts for certain Correspondence courses. The cooperation of the various teaching schools has been sought.

An assessment of the radio reception from students in some parts of Zambia indicates poor reception. The government has, nevertheless embarked on improving radio transmission to all parts of Zambia.

TELEVISION

Television reception is limited to the major urban and peri urban centres rather than extending to distant rural areas. It would therefore not be feasible to introduce correspondence teaching by Television. It would be advisable for us to consider utilizing broadcasts via satellite.

AUDIO CASSETTS

The feasible suppliment to written lecture materials for correspondence students would be the use of Audio-Cassett players at the Resident Tutors' Provincial Centres. This has not been possible due to the lack of financial resources. Efforts are under way towards seeking financial resources to implement this mode of instruction.

AUDIO-VISUAL CASSETTS or VIDEO TAPES

Audio-visual cassette players would be feasible means of supplimentary instruction and would operate on batteries. The video tapes would also be feasible if they are battery operated or with good electricity supply.

The Department has not been able to impliment these essential means of instructional Technological Aids due to lack of funds. If any organization can come up with the required funds we can be in a position to impliment these programs. Psychological Studies have shown that audio and audio-visual instructional techniques contribute more to learning than the written words.

WEEKEND SCHOOLS

The Department has funds for faculty and department staff travel, boarding and lodging at various Provincial Resident Tutor University Centres to meet students during weekends. Because of the high demands for faculty time in internal full-time teaching, this aspect of instruction has not been fully utilized.

FLYING TUTOR SERVICE

There are the most remote areas of Zambia like Chilubi Island, where ground transport means cannot reach. The Department is making efforts to meet the educational needs of the people in those areas by collaborating with the Flying Doctor service. If funds were available the Department would purchase a small plane for Flying Tutor service.

LIBRARY FACILITIES

Because of the distance from the main campus for correspondence students, the University Library has a correspondence student section and lending arrangements on a longer time basis than full-time students.

BOOK STORE

All lecturers submit their recommended textbooks and supplimentary reading books to the University book store for purchase. The Department of Correspondence Studies advises the students about the required books so that they may purchase them.

POLICY FORMULATION ON CORRESPONDENCE STUDIES

1. Professional Committee on Correspondence Studies:

The Head of the Department of Correspondence Studies is Chairman of the Professional Committee. All the academic staff and the Center's Director and the Heads of the University Extension and Conference Unit, the Department of Adult Education and in-service training and the Mass Communication Department are members of the Professional Committee. Further representation in the committee is from the Ministry of Education by the Principal of the National Correspondence College.

The Head of Correspondence Studies prepares agenda items and convenes the professional committee meetings. Recommendations from the Professional Committee are sent to the Center for Continuing Education Board of Studies. The Professional Committee deals with all academic matters concerning Correspondence Teaching and serves as a guide towards policy formulation.

2. Center For Continuing Education Board of Studies:

The Director of the Centre is Chairman of its Board of Studies. All Department Heads under the Centre and academic staff within the Centre are members of the Board. Also represented in the Board are: the School of Education Dean, the Ministry of Education, Adult Education Unit, the Ministry of Education Inspectorate, Community Agencies, and the Diploma Teacher's Colleges, the School of Agriculture and related Ministries and Community Agencies.

Besides several other policy issues in relation to the other Centre Department, the Board also deals specifically with Correspondence Studies policies as recommended by its Professional Committee. After debating the issues, the Board submits the items it has approved to Senate for consideration and final approval.

3. Senate

The Vice Chancellor is the Chairman of Senate and the Registrar is Secretary to Senate. The University Senate is the Academic governing body. It receives the Boards of Studies recommendations for final approval. The Director of the Centre for Continuing Education and one individually elected member from the Centre are members of Senate.

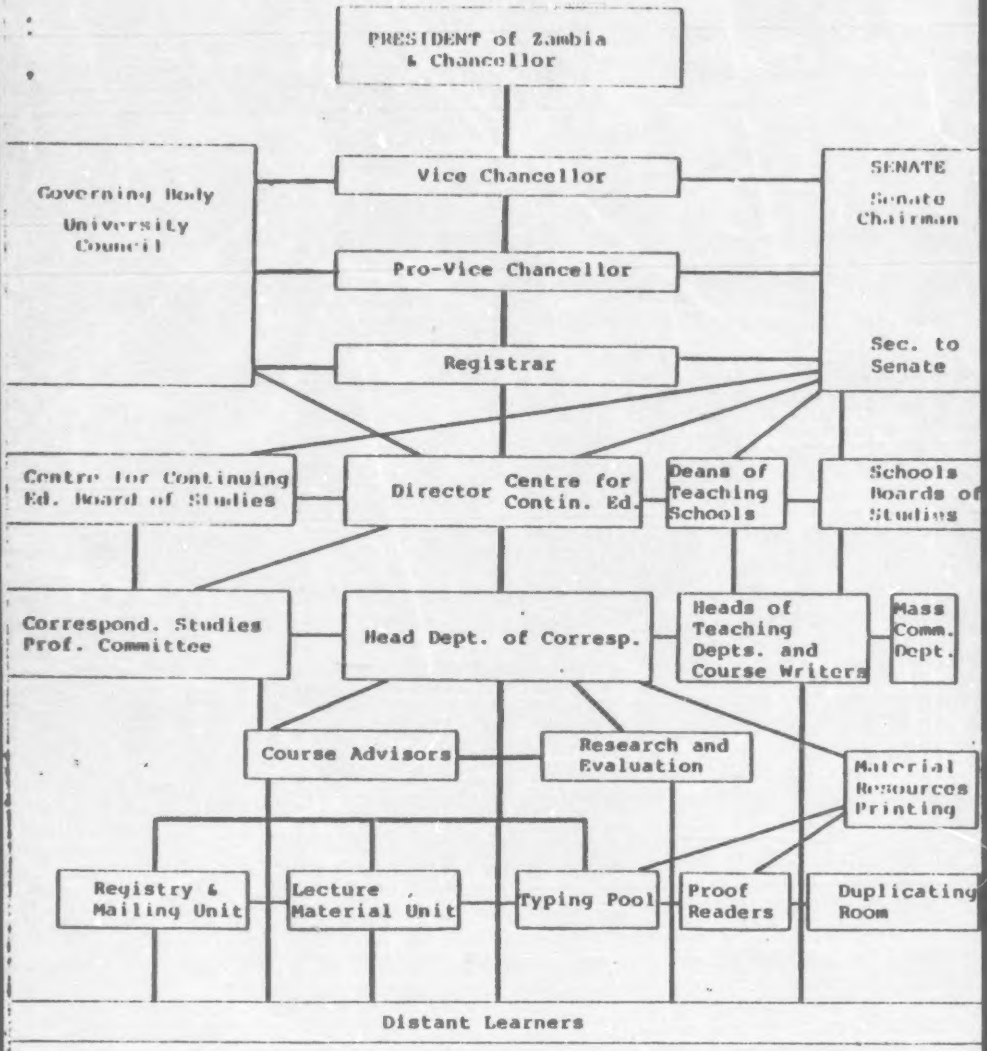
Deans of Schools and other elected officers, and Mininstry representatives are members.

Once the recommendations are approved by Senate, they become official university policy, and are supposed to be implimented.

4. The University Council

The University Council is the overall governing body of the University. Major new institutional developments and University staff are under the governance of the Council. The Council has a Chairman.

The University Administrative structure in relation to Correspondence Studies is presented in the following paradym in the following page.


PRESIDENT of Zambia
& Chancellor
Governing Body
University
Council
Vice Chancellor
SENATE
Senate
Chairman
Pro-Vice Chancellor
Registrar
Sec. to
Senate
Centre for Continuing
Ed. Board of Studies
Director Centre for
Contin. Ed.
Deans of
Teaching
Schools
Schools
Boards of
Studies
Correspond. Studies
Prof. Committee
Head Dept. of Corresp.
Heads of
Teaching
Depts. and
Course Writers
Mass
Comm.
Dept.
Course Advisors
Research and
Evaluation
Material
Resources
Printing
Registry &
Mailing Unit
Lecture
Material Unit
Typing Pool
Proof
Readers
Duplicating
Room
Distant Learners

3.15.4. Panel Discussion

In a group discussion of the Zambian Panel the following information was given on top of the papers of Dr. Ndlovu.

In 1963, just prior to independence, a commission of the development of the University of Zambia proposed that the University established a correspondance education department. This occured in 1967, two years after the University was founded. The Correspondance Studies Department (CSD) was based on the New England, Australia model. There were some problems in getting the Department accepted by the largely expatriate staff of the University. The CSD is an administrative unit which depends on faculty staff to write lessons and teach distance learners. Indeed, faculty staff are required by contract to teach all categories of students, full- or part-time, or students studying at a distance. CSD which are marked by the lecturers (and which count for 50% of the final grade) and do a final exam. Lecturers comment to the students on their work, but no model answers are provided. Students who do not complete formal assessment are allowed to withdraw from a course and re-register at a later time, rather than being categorized as failures. Most students are adults and in employment. The education they receive contibutes to their job improvement and to the needs of the nation. There are students who have sat for their examination in countries in all continents. The course materials prepared for CSD students stress the laerning objectives to be achieved, and item analysis is used to see if the teaching or questions asked of the students contribute towards the achievement of learning objectives. The organizational and decision-making structure of CSD are described in the paper.

CSD makes use of the local centres originally established for the National Correspondence College. The residential tutors at these local centres give advise to CSD students or administrative matters, but do not tutor them. CSD students do, however, attend the campus of the University of Zambia once yearly on a residential course. Local centres have yet to be equipped to the degree which CSD staff would like them to be equipped. Some books are available at the centres, and the University bookshop also reserves books for CSD students. It is hoped to introduce radio programmes at some time in the future.

Students of the University are not necessarily either full-time campus-based or learning at a distance. There is considerable inter-change. The unit cost for students studying at a distance is Zambian Q 5oo as against Zambian Q 2,5oo for full-time students. Thus distance study represents a considerable saving on costs, and this is an argument for its extension. The panel agreed that there was a need for distance study to be recognized and accepted as a viable alternative to full-time study wthin the African context. There was no reason why, for example, students studying at a distance and with a job should not get paid educational leave to attend the University full-time should this be necessary, or for attendance at examinations. This occured in Zambia.

The University of Zambia, which normally required "O" level entrance qualifications in 5 subjects, has a Matured Entry Examination to test applicants without the formal entry qualifications.

A very urgent problem is the manpower needed to support the various programmes of the University. There are considerable problems in recruiting lecturers and it is not possible to expand departments at the desired ratio of one lecturer for every 5o correspondence students. Lecturers are therefore overburdened. Where part-time staff are contracted there is always the danger that they will let one down. The University tried to guard against this by having a team of subject specialists supporting the CSD students, but real difficulties are being experienced in this area.

3.16. Experiences with Distance Education in Lesotho

The following panel discussing the above metioned topis was composed of the following experts:

Moderator: Mr. T. Dodds (United Kingdom)
Members: Mr. A.T. Chele, Lesotho Institute of Further Education (LIFE)

Mr. M. Moshabesha,	Institute of Extra-Mural Studies, National University of Lesotho
Mr. T.H. Shale,	Lesotho Distance Teaching Centre, Ministry of Education

The panel discussion began with a description of the activities of the National University of Lesotho's Institute of Extra Mural Studies. The Institute was established to respond to Lesotho's needs for skilled manpower. Therefore programmes were designed and delivered for off-campus students in areas such as business studies and mamagement. The programmes provide diplomas and degrees and courses planned ba the academic faculties of the University. A part-time studies committee advises the University on the running programmes. There are at present about 12o degree students and about 4oo diploma students.

All students are part-time and receive face-to-face tuition at a centre, 35 miles away from the University. Instructors come from the regular University staff and the degree course lasts six years.

Then followed a review of the work of the Lesotho Distance Teaching Centre. The justification for the creation of this centre in 1974 is based on the need for educational opportunities to be provided to disadvantaged groups such as drop-outs, push-outs and never-beens as well as on the need for the working population to have their knowledge and skills upgraded.

The Centre's overall objective is therefore to provide education to the majority of these people, who happen to inhabit rural areas, through distance teaching techniques. The latter include correspondance courses, cassettes, slides, tapes etc. Although the correspondence methodology is directed at supplementing formal education, it receives low priority at the centre because it is expensive and restricted to a small minority. Distance teaching for nonformal education is therefore the area of emphasis of the Centre. This is so because the Centre realizes the need for functional education and occupational skills to be provided to the greater number of people. Besides, non-formal educational programmes attract much more easily the interest of donor organizations.

The Centre has an inbuilt research unit which researches on educational needs of rural people and on the basis of its finds the Centre proceeds to design programmes, pre-tests them monitors their application and evaluates their impact.

Important areas of activity include literacy and numeracy. An on-going pilot project is the well-known "herdboy" project. Last year there were 23o boys receiving literacy and numeracy education in the project, assisted by animateurs known as group leaders. There are boys who are herdboys, but who also have received a minimum of seven years of schooling. The teaching material is self-instructional designed to provide basic literacy which would after 8 months allow the user to co tinue with independent study. The method has been so successfu that it has now been adapted for use in mines, prisons and homes. The literacy course is supported by newspapers and booklets on various subjects.

The following discussions clarified points pertaining the entry requirements for freshman into the Institute of Extra-mural Studies diploma and degree programmes, subject structures, course offerings, success rates and reasons for them, recognition of certificates, diplomas and degrees. The Lesotho Distance Teaching Centre reaches 4oo people in their formal programmes. These include secondary school students and unqualified teachers. In the rural areas many people are reached throu the Centre's non-formal education programmes, but the extent of their success is yet to be fully evaluated.

3.17. Development of Distance Education in Nigeria

The Nigerian panel was formed of the following experts:

Moderator: Mr. D.N. Okunga (Zambia)
Members: Dr. J.A. Akinpelu, University of Ibadan, Dept. of Adult Education

Mrs. Clara Leton, Fed. Ministry of Education

Dr. C.H. Oguntonade, Correspondance and Open Studies Unit, University Lagos

Mr. H.S. Wali, National Teachers Institut

By this panel the four represented institutions were discussed.

3.17.1. The Role of the Federal Ministry of Education

The Federal Ministry of Education controls (where appropriate) and co-ordinates the work of the 19 States Ministries of Education, catering for 8o millions of persons. Education by correspondence education is seen as an important path towards education in Nigeria for those who cannot have access to traditional education. A large number for foreign commercial correspondence colleges and indigenous private correspondence colleges had sprung up. In February 1977, by Degree No. 11, Educational Correspondence Colleges Registration Decree, the Federal Ministry of Education is empowered to accredit or close down correspondence colleges on the basis of an assessment of their standards. Following visits of the United Kingdom Council for the Accreditation of Correspondence Colleges in London and extended visits to the United Kingdom correspondence colleges, the Correspondence Unit of the Federal Ministry of Education drew up procedures for assessment of colleges. It also did a preliminary study of colleges in Nigeria which showed that of some 7o identified corresondence colleges only about 17 seemed to be satisfactory, and many had no physical pre sence at their stated address. By a Decree of 29 July 1979, all correspondence colleges (indigenous and foreign) operating in Nigeria must be registered within 6 months or cease to operate. The Unit will continue to monitor the course materials produced by colleges all of whom will be required to register every 3 to 5 years. Colleges, which can award their own certificates of course completion, are encouraged to prepare students for existing and recognized examining boards. The aim is to phase out foreign correspondence colleges in due course, but foreign correspondence colleges with a home-based accreditation body (and which have been accredited by it) will be able to oparate; those without an accreditation body in their own country will have to be accredited by the Nigerian Unit.

3.17.2. The National Teachers Institute (NTI)

In 1974, the Government adopted the aim of universal primary education by 1982. A start was to be made on this programme by 1976. In 1974 there were 130.000 primary school teachers of which 75.000 wereuntrained (54%). By 1980, there will be an estimated 340.000 to 360.000 primary school teachers, out of which 180.000 (up to 70%) will be unqualified teachers. A special distance education institution was established (the NTI) to solve this problem. NTI works through field centres which are responsibel for the distribution of materials. Each field centre has a number of study centres to which teachers are attached. These field centres generally exist in traditional Teacher Training Colleges. Most States have now established Field Centres or Field Offices, and many have begun to set up study centres. The States select the teachers to be trained on agreed criteria. Pilot projects are now operating in States, and the NTI has produced a preliminary course to enable grade 2 teachers to be upgraded. NTI is an autonomous body with a council upon which are representatives of many educational sectors in Nigeria. The aim is to begin field work as soon as possible, but materials production must be speed up. Courses are prepared by the NTI and tested before use. They are in English, Mathematics, Science and so on. Television is to be made available to the NTI. The NTI has a good printing capacity. Its course wirters are graduate teachers with 10 years experience. The characteristics of the target population is to be researched. Some feel that the task before the NTI is too great for a single institution, and that it should be decentralized to the 19 Field Centres. This is under consideration.

On this very interesting Institute some additional information may be of interest for the readers of this report. Therefore I include parts of publications of the Institute:

A) NTI Field Services (Information Booklet No. 4): Part I

NTI

NATIONAL TEACHERS' INSTITUTE

PART I INFORMATION

1. Introduction

The Federal Military Government's decision to establish a National Teachers' Institute at Kaduna represents a bold, innovative and in many ways unique approach to the pressing problem of improving the quality of underqualified teachers already teaching in our schools. It also represents the introduction of a continuous programme of quality control in teacher education in Nigeria.

Some information of a general nature about the NTI has already been published (see "National Teachers' Institute – an information booklet", published in July 1976). This present booklet focuses attention on the Field and Study Centre network which the NTI is in the process of establishing. A main objective of the booklet is to involve the States in the design of the field services network. In the latter part of the booklet, questions are raised about the extent of State participation in the network. The replies of the States to these questions will help the NTI to identify each State's particular needs and respond to them as relevantly as possible.

2. The NTI approach to teacher education

By combining effective methods of distance education, self-instruction, curriculum development, evaluation and research, the NTI and its Field Centre Network will undoubtedly have the potential to become a major vehicle for growth in Nigerian education.

The primary functions of the NTI are reflected in its structure, details of which are given below.

2.1 School of Basic Studies

A School of Basic Studies will have the responsibility of preparing self-instructional materials, beginning with those suitable for up-grading sub-Grade II teachers throughout the Federation.

2.2 School of Educational Innovation

A School of Educational Innovation – the first of its kind in Nigeria – will assist the School of Basic Studies with problems of course development and evaluation. It will also conduct classroom-based research aimed at providing data of relevance to course writers about the teaching/learning process.

2.3 Facilities Department

The Facilities Department will accommodate the kinds of highly specialized equipment and systems that are necessary in order to operate an effective large-scale distance education programme. The Department will have a self-supporting Graphic Arts and Printing Unit. It will also have Audio-Visual and Photographic Units which will produce all the non-print materials that will either be integrated into the learning packages or serve as supporting materials. A Computer Centre will form part of the Facilities Department and will handle, among other things, registration of student data, evaluation of student progress as well as analysis of course materials evaluation. The Facilities Department will also be responsible for the physical links between NTI Headquarters and the Field Centres.

2.4 - Field Network

This booklet presents an outline of the field services network which reflects the thinking of the NTI foundation staff on the matter. It should be borne in mind, however, that changes in design are quite likely to take place as a result of the States' answers to questions raised in the booklet.

2.41 Structure

A well - established field network is a necessity for the proper functioning of a Distance Learning System. The NTI is to locate a FIELD CENTRE in each State capital with assistance from the State Ministry of Education. These Field Centres are expected to feed NTI materials into a number of STUDY CENTRES which will serve as the NTI-students' link with the Institute. These Study Centres should therefore be within commuting distance from the student's home or school. The Study Centres will also provide students with tutorial help on a limited basis; they will be a place where a student can listen to radio-programmes (or audio tapes), view slides and use other supporting materials such as laboratory kits, reference books, etc.. A Study Centre will also be a place where the student can meet other students for mutual help and stimulus. The Study Centre supervisor will be responsible for collecting student assignments which are to be marked at the NTI and also for collection of other data of importance to the Institute. The NTI will be dependent on the State Ministries for the setting up and running of these Centres.

Although it is unlikely that the full complement of Study Centres can be established in the first few years, it is urged that as soon as possible Study Centres be identified by the States and set up in such places as Divisional Headquarters and Local Government areas.

It will be necessary for the NTI headquarters at Kaduna to establish a zonal field services superstructure to provide logistical assistance with the various aspects of the field network activities. This would be as follows:

Zone 1 Lagos, Ondo, Ogun, Oyo, Kwara (Zonal Centre: Ibadan)

Zone 2	Sokoto, Kaduna, Kano (Zonal Centre: Kaduna)
Zone 3	Rivers, Cross River, Anambra, Imo, Bendel (Zonal Centre: Enugu)
Zone 4	Bornu, Bauchi, Gongola (Zonal Centre: Bauchi)
Zone 5	Plateau, Benue, Niger (Zonal Centre: Jos)

NOTE: Zonal Centres are expected to help in the distribution of materials. They are not Field Centres, though they could be sited with a Field or Study Centre.

2.42 Staffing

Soon after the Field Centres are established, a number of NTI senior and intermediate staff will be recruited mainly to be involved with field work. A Field Services Department will be established at the NTI. The head of this department will co-ordinate all the activities outside the NTI headquarters.

It is desirable that each Field Centre when fully operational should have the following senior staff members, recruited by the NTI in consultation with the State Ministry:

(a) an officer-in-charge to co-ordinate work at the State level (P.E.O. level, NTI employed)
(b) a S.E.O. assistant to the co-ordinator (State employed)
(c) a media resources officer (State employed).

It is expected that each State will provide the Field Centre with the following basic intermediate and junior staff:

(a) one clerk-typist
(b) two typists
(c) a technician and two assistants
(d) a driver and one mechanic
(e) three watchmen
(f) two labourers
(g) two messengers.

2.43 Study Centres

The face-to-face component of a distance learning system is essential, not just to make the NTI's teaching more effective as such, but also to reduce the student-teachers' feelings of isolation and to assist them to meet and work together. . anticipated that these opportunities for group sessions inject greater and longer-lasting motivation into the lean situation. It is suggested, therefore, that the State Minist of Education will co-operate with the NTI by using one other of the following as study centres:

- *teachers' colleges (suggested by Sokoto State)*
- *other post-primary institutions*
- *primary schools*
- *any other building or structure.*

In each case the States will be encouraged to retain person on a full or part-time basis to act as centre coordinate

Each student-teacher must be given every encouragement spend some time at his centre as often as possible. It *essential* that local authorities actively encourage stude teachers to make full use of the available facilities.

2.5 School of Advanced Studies

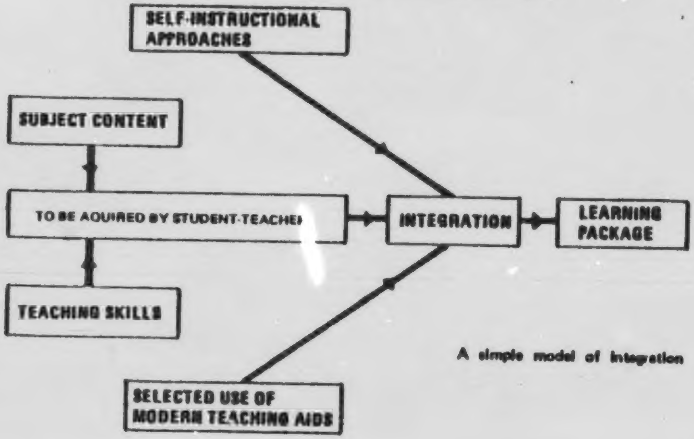
Once the NTI has become operational in terms of developi Grade II materials, a School of Advanced Studies will l established. This School will, in the first instance, prepa learning packages for the up-grading of Grade II teachers t the NCE level.

3. Quality of materials

It must be recognised that the most critical element in the opera tion of the complex NTI system concerns the quality of staff Experience elsewhere has demonstrated that the success of any system of on-the-job self-instruction depends on the excellence of the learning materials. The production of excellent materials calls for the appointment of staff of the highest calibre in terms of academic and technical competence, experience, adaptability and perseverance.

The development of learning packages, i.e. the sets of instructional devices making up the complete course (printed materials, sound and TV programmes, and Audio-Visual aids) calls for a thorough understanding of the subject content and for a higher level of pedagogic skill and imagination than is usually demanded by more orthodox approaches.

The diagram below, for instance, illustrates the in-puts necessary for the production of effective self instructional material. It can be observed that the subject content and the teaching skills required by the student-teacher must be supplemented by modern teaching aids and presented in self-instructional form. The final product should be a course in which content and skill training are skilfully integrated. It should also make effective use of various modern teaching techniques and approaches. An important aspect in the design of self-instructional learning materials is the proper sequencing of subject-matter and its presentation over an extended period. An example of this overview and sequencing method is shown on pages 14 and 15. Such charts can be completed for different subject areas indicating what should be covered over a specific period. The chart will help in determining not only the order of presentation but will also permit a more rational assessment of progress.


SELF-INSTRUCTIONAL APPROACHES
SUBJECT CONTENT
TO BE AQUIRED BY STUDENT-TEACHER
INTEGRATION
LEARNING PACKAGE
TEACHING SKILLS
SELECTED USE OF MODERN TEACHING AIDS

A simple model of Integration

To ensure this high standard, NTI materials are produced by highly qualified Nigerian educators supplemented by Unesco specialists and other specialists on contract with the Government or called in as consultants. The course-writing teams assembled in this way will mainly perform their functions at the Kaduna base of the NTI.

The NTI, moreover, is particularly concerned with ensuring that its materials are based upon the needs of the local situation. In this respect the Field Centres will play a vital role in providing NTI Headquarters with the necessary information. They will also assist the NTI in arranging local workshops at which NTI course-writers will be given an opportunity to work together with local teacher educators. In this way NTI staff will be able to thrash out major problems relevant to the State and to draw up the broad outlines along which they will have to work in order to produce the most suitable materials for the State in question.

The NTI's concern about the appropriateness of its materials also entails the mounting of classroom-based research programmes which will aim at

- *providing data on the teaching/learning process, especially where this is related to the acquisition of science and mathematics concepts and language skills;*
- *systematically testing the effectiveness of the NTI's materials.*

The NTI is committed to using research as an instrument to effect improvements in the primary classroom. The Institute is also pledged to carrying out continuous evaluation of its own performance in the hope of remaining relevant to the needs of a rapidly changing educational scene.

B) Status and Planning Report (No. 4, September 1979)

An interesting part in this report is the Staffing. This list shows, that much more staff is required for the expanding operations than initially had been planned for.

STAFFING

Director of the Institute: Hafiz S.Wali

Confidential Secretary to the Director: Keziah Nnodi

Senior staff by contract category in alphabetical order:

Local

A. Ajayi	Graphic Arts Specialist
M.O. Chukwu	Specialist in Teaching of History and Education
J.S. Egwuna	Assistant Librarian (N.Y.S.C.)
H.M. Gaiya	Assistant Technical Officer (Training Mech.)
Mairam Garba	Assistant Librarian
S. Gbadamosi	Maths. Specialist
R.I. Izegaegbe	Assistant Executive Officer (Accounts)
S. Jibirilu	Assistant Technical Officer (Training Elect.)
A.S. Obigbesan	Assistant Graphic Arts Officer (N.Y.S.C.)
C. Okeke	Health and Physical Education Specialist (Senior staff in English and Mathematics are expected before mid-October.)

Unesco:

M. Eleria	Textbook Producer
J. Heinkens	Science Specialist
H. Ibstedt	Operations Adviser, Acting Education Adviser
M. Khan	Maths. Specialist
D. Martin	Educational Technologist
J. Murdoch	English Language Specialist
L. Segerback	Textbook Illustrator
J. Tan	English Language Specialist
A. Valovirta	Printing Specialist
M. Yaxley	Science Specialist

Contract Expatriate:

E. Deeson	Publishing Section
A. Henderson	Social Studies
N. Henderson	Social Studies
A. Robinson	Teaching Methods and Curriculum Development

Intermediate Staff

Assistant Executive Officer	1
Composer Operators	2
Printers	2
Camera Operator	1
Assistant Technical Officers	2

Junior Staff

Clerical Assistants	2
Typists	6
Printing attendants	2
Graphics attendant	1
Stores assistants	2
Messengers	4
Drivers	6
Carpenter	1
Cleaners	3
Nightwatchmen	20
Cook	1
Stewards	3
Labourers	4
Plumber	1
Electricians	2
Telephone Operators	1

TRAINING

With the rapid growth of the NTI's technical facilities also follows a need to identify suitable technicians who after further training will be competent in operating the NTI's specialized equipment. Thirteen technicians (OND-type) are presently being employed and are receiving or will receive training as technical staff in the following fields:

printing technology
graphics
photography
data processing
electrical/mechanical engineering

Some of this training will be on the job training but in many cases it will be necessary to send technicians for training by the companies who have supplied the equipment or to other specialized institutions both in Nigeria and abroad.

From the same report we also include the parts on Instructional Objectives, Method of Approach and Course Content.

INSTRUCTIONAL OBJECTIVES

These are stated in terms of terminal behaviours of student-teachers. That is in terms of skills the course writers anticipate that the student-teachers should develop through a conscientious and systematic study of the course. The instructional objectives derive from the general objectives of NTI. To achieve the objectives, instructional strategies - planning and sequencing of modulus and units, choice of instructional materials and mode of presentation are selectively and discriminatingly executed.

METHOD OF APPROACH

The method of presentation is that of self-instructional approaches, suitable for distance education, so that the students can effectively study the materials with little or no help from a tutor. The units are presented in simple, basic English with copious pictorial illustrations. Materials used for illustrations are those considered capable of aiding the students to understand the unit. The use of sophisticated media, such as video cassette, radio, television, etc., at least at study centres to reinforce the printed materials is contemplated.

COURSE CONTENT

The units contain simple, short instructions on lesson organisation, class control, methodology and other practical calss room skills,designed to improve the quality of primary school teaching and learning. A variety of ways of introducing, presenting and recapitulating lessons and questioning techniques are prescribed as integral parts of the course, and increasing use of practical, group and individual approaches to teaching is strongly advocated as a means of motivating children to learn. Course components therefore are:

(i) written and aptly illustrated units,
(ii) self-assessment exercises,
(iii) answer sheets,
(iv) glossaries,
(v) non-print materials (to follow later),
(vi) charts,
(vii) posters.

3.17.3. The Department of Adult Education, University of Ibadan

Established in 1949, the Department offers model adult literacy classes and extra-mural studies to good students, as well as conventional programmes. The need for distance education in Nigeria, with only 15% of qualified applicants admitted to universities in 1978, is evident. Lack of funds has stopped the development of a distance education programme in the University, but certain policy decisions have been taken. Students on the programme must satisfy the same admission qualifications as conventional students. The degrees which the University plans to offer will be taught by the same academics (who can participate or not, as they wish, in the programme, for which participation they will be paid). Additional staff will be at the ratio of 1 to every 40 correspondence students. Arrangements for students and tutors to meet at study centres, and to attent a month's residential course, will be built into the programme. Correspondance texts will be supported by tapes, and hopefully broadcasting in the end. A mobil library will be set up and the other Departments of the University would have an autonomous right to participate or not in the programme.

3.17.4. Correspondence Study Unit, University of Lagos

The University, establishe in 1962, was charged with running programmes for both full-time and part-time students, catering for the needs of society. COSU has not been able to start on non-formal educational programmes as yet, for financial reasons, but it has now BSc. (Education), Bbc. (Business Administration), Bsc. (Accounting) and a Postgraduate Diploma of Education programmes, with an LLB and a B.A. (Education) programme planned. COSU teaches by course texts, radio and face-to-face tutorials. Materials are sent to study centres by courrier service to 14 study centres. Students meet at centres approximately every 3 weeks. There is a residential course on vocation. Radio is in the initial stages of use. Course texts have self-assessment questions, and students do written assignments and examinations at the end of the year. The main problems of COSU are financial, and getting course writers from other universities to help in preparation of materials.

In this we refer to the study of Dr. C.B. Oguntonade (abstract):

AN EVALUATION OF THE OPERATIONS OF THE STUDY CENTRES OF THE DISTANCE EDUCATION SYSTEM OF THE UNIVERSITY OF LAGOS.

Abstract

An evaluation of some aspects of study centre tutoring in thirteen out of the established fifteen study centres is carried out through students' rating of tutors and facilities in each centre. Students' free and general comments on the programme are also elicited.

A four-point rating scale is used for evaluation of tutoring in Elements of Business, Principles of Accounts and Elements of Cost, Mathematics for Social Sciences, Biology, Chemistry, Mathematics, Education and Laboratory Practicals. Library, Classroom and Lunch facilities are also evaluated on the same scale.

The study centres are grouped into five categories according to the type of institution in which they are located. Percentages of responses on each point of the scale are calculated and compared.

Results show a general satisfactory picture of the study centre details evaluated. However, the university-based centres are almost consistently rated better than

....(ii).

other categories of centres. Centres based in Polytechnics and Advanced Teachers Colleges show satisfactory performance at the present level of academic work while there is overwhelming evidence that school-based centres are not satisfactory.

Students' suggestions are grouped into fourteen categories, summarized and discussed.

A number of implications for research and planning are discussed.

3.18. How do we develop Distance Education in Africa?

In an all-African panel this topic was discussed. But first the several panel members told about developments in the institutions they represented.

Moderator: Prof. O.P. Kulshreshtha, Sri Lanka
Members: Mr. B.C. Marumo, Botswana
Mr. R.Y. Mwakatobe, Tanzania
Mr. K. Noyau, Mauritius
Dr. A. Sahnoun, Tunesia

3.18.1. Mauritius College of the Air

Mauritius is an island of 72o sq. miles with one million persons. Nearly everyone goes to primary school. 9o% of secondary schools are private, of which most are run on commercial grounds. The University caters for the needs of development and has resisted the development of courses not related to the needs of the country. Education was made free by a 1976 Government decree. Distance education methods are used to provide opportunities for those who cannot go to school; it also provides courses for use in schools where standards are not as high as they might be. Mauritanians own about 8o.ooo - 85.ooo television sets, and radio sets are widely owned. Radio and TV sets have been put in schools using MCA courses. The schools opt of their town accord to take MCA courses. MCA began in 1973 and this to provide for the schools courses which will meet their needs. In 1973, MCA reached 23 schools. In 1974, enrolment went from 3.ooo to 1o.ooo at which stage a plateau was imposed. In 1976, the Institute of Education began and soon provided courses in schools to replace the largely imported textbooks. This meant the MCA began to lose its customs in the schools. It provides courses in English, Human Biology, Biology, Mathematics and French. It also provided for a while courses in subjects such as wood-work.

MCA began with Government blessing, but found its work in schools taken over by the Institute. Moreover, MCA also wanted to develop Nonformal-education. From the start, with an element of correspondence education, and using NEC (UK) courses for "A" level students; it had a small number of correspondence students. MVA provides courses at the request of firms , creating new courses or adopting courses for the teaching of English. This has been successful. MCA is to prepare a course for telephonists/receptionists. MCA uses BBC's English by Radio tapes to have a course in English for business purposes (7oo students). MCA has access to free radio and the course materials too are free. MCA has an eaves-dropping audience. Television is used mostly for English language, but also for French and Biology - using mainly imported with some local materials. A small film section has been created.

MCA is also looking at the needs of primary school teachers for a course in French (3oo students); courses to persons taking "O" levels (35o-4oo students who had failed school certificates but were interested in taking "O" levels in English, Human Biology, Biology, Chemistry, Physics and French). MCA also gave careers advice to these students in a full-day face-to-face session.

Recognition of distance education has had to be struggled for. Use of the media has been important in attracting attention to what MCA does - particularly where the media reflects local development needs. MCA is publicity conscious, which is important. When MCA started it was difficult to get students because MCA was unknown. MCA's succeed in its courses stems from the fact that it had to try to capture the market, led to experimentation in its courses and areas of operation. Finally, there is the question of size. If one is small one is overcovered and looks like a "shoe string" organization. Generally, distance teaching institutions have to come in and find a place within the existing structure of traditional education. When MCA begins a programme, it co-operates and discusses its policies with other institutions in the field.

3.18.2. Experiences in Tunisia

Dr. Sahnoun stated that distance education was not very developed in Tunisia. About 25% of the population has been to school. About 35% of the budget is devoted to education. Distance education is used to overcome specific problems rather than have a national policy. The Radio and Television networks have organized courses, as have some commercial and government agencies. There is no overall strategy.

The national School of Administration in Tunisia organizes courses for those who have not passed higher school certificates and want to enter an administrative career; courses of in-service training, prepared by experts or NSA or university teachers, to help in promotion prospects of staff. The courses are modularized and each section has assignments for students to do. However, only about 10% of the students are sent for assignments.

Most of the problems in Tunisia are familiar. The teachers are unused to the methodology; editing and communication problems are found; producation problems; the lack of student-tutor contact; and lack of resources. Tunisia has requested ECA's assistance, which sent a very helpful mission. Improvements in administrative areas - an explanatory brochure was prepared to help students; student statistics were prepared. This has helped. Also, there have been changes to course lay-out and structure.

An evaluation and assessment of 600 students was carried out. 57% of students want to maintain French as the language of instruction. 30% felt the courses were difficult; 62% had to resort the dictionaries. The presentation of the courses was felt by 35% to inhibit assimilation. 47% felt diagrams should be used. 80% wanted an end-of-section summary. 68% feel the questions asked are difficult, though the assignments were valuable. 80% ask that the Text give greater guidance. 70% feel the course is too long. 63% want meetings with tutors. 48% felt the courses were very useful as preparation for exams. 94% felt they helped understanding in their job.

Dr. Sahnoun then replied to the question: How can we develop distance education? We do not need to awaken an interest in our political desicions-makers. We need:

(i) to overcome our operating problems;
(ii) The development of bilateral co-operation between institutions at similar levels;
(iii) we should develop international co-operation to benefit from consultancy services, or in the training of our staff, or acquisition of teaching nationals;
(iv) Finally, if we have no resources to set up our own institution we should ask ECA to continue in the field, or UNESCO to help us.

Dr. Sahnoun repeatedly stated the importance of the ECA mission to Tunisia and the advisory services provided by ECA. Therefore we reproduce here after a part of the Mission Report prepared by Dr. J.R. Hakemulder.

3.18.3. ECA-Mission Report: Tunisia

TUNISIA

Introduction

On the request of the "Ecole Nationale d'Administration" of Tunis, I thought it worthwhile to include Tunisia in my missipn schedule.

Next to the work in the ENA I found the possibility to visit both the University and the Ministry of Education. I also visited the British Council and the Netherlands Embassy in Tunis.

I remember with pleasure the good and friendly co-operation in the ENA and also the very kind care which was taken of us during our free time.

Ecole Nationale d'Administration

I think it very brave of the ENA, that its Director has decided to start as first and only institution in Tunisia, a correspondence course. Not only does this show courage, but also a good foresight for an efficient use of manpower and funds. In the course of this report it will be shown, however, that there are many problems to deal with, mainly the lack of trained manpower in the techniques of distant education.

Again the foresight of the Director is shown from the fact that these problems have been described exactly (see Annex IV) and that assistance has been requested from ECA.

Meetings, discussions, etc.

Mr. Hamed Zghal -	Director of the"Ecole Nationale d'Administration"(ENA);
Mr. Sahnoun -	Director of the "Centre de Recherches et d'Etudes Administratives" (CREA);
Mr. B. Arab -	Chef de Service of CREA.

Discussions have been held with several members of both the administrative and the technical personnel of the Institute. I appreciated very much the friendly and nice way in which the discussions took place and especially that my difficulties in connexion with the French language were understood. Tunisia has been the first French-speaking country I visited.

Information from discussions, checks on the spot

The correspondence courses are meant for two types of students:

a. students who are already working in the civil service (in-service training);

b. students who are not yet working in the civil service (pre-service training).

Compared with the normal courses the Institute has the opinion that the results of the correspondence courses are satisfying. Still I got the impression that this point needs more evaluation, because of the following reasons:

i) checking the students files - because there were no statistics available - I noticed that not more than 10 per cent of the students answered the questions and exercises in the courses and sent them back to the Institute. This is a disappointing low percentage. Because of this there is hardly any feedback and the tutors are not able to find out if their lessons are understood, the exercises are of a good level, etc.

ii) the examinations are organised by the Ministry of Finance and the ENA is not informed of the results. Here again there is no evaluation possible because of this.

In the courses textbooks are used, which are published by the ENA. As far as I can judge these books are good.

The courses are at different levels: from secretarial level to the level of administrators.

The ENA has a contract with the Ministry of Finance, to train civil servants for this Ministry.

Several problems were mentioned:

i) How to get back the replies from the students;

ii) The contact between the CREA and the professors;

iii) Contact between the students and the CREA.

So in general communication is a problem. First of all the students have to be "forced" to send back their assignments. Next to this the possibility of summer vacation courses has been discussed extensively. The problem here is, that the ENA has only part-time tutors. Therefore face-to-face meetings would have to be organized either right after starting the courses or some months later. At the end of the courses it would be too late to help the students with their work. On top of this it has to be investigated why the students do not answer their assignments. Perhaps they do not understand them?

In checking the procedures of sending the courses I found the following rules:

i) There are 7 subjects. The first time an initial series of 7 subjects is sent to the students;

ii) After having returned their answers the students will receive a second series;

iii) When the student does not answer he will receive a reminder. If there is still no answer, the sending of courses will be stopped.

All data on students are recorded on cards. Each student has his own card. There are no statistics available.

The machines in the printing section leave much to be desired. The offset machine is out of order and beyond repair. The cyclostyle machines are in a bad condition; they are 6 years old already and are used for the entire Institute.

Urgently needed are:

i) one offset machine (double Gestetner);

ii) three cyclostyle machines;

iii) one machine for electronic reproduction of stencils;

iv) one machine for binding (plastic covers, etc.).

Discussed were the use of audio-cassettes and training stages for members of the ENA's teaching personnel.

Together my questionnaire was filled, which gave rise to many clarifying discussions.

Information from the questionnaire

This school has been established in 1956 and works independently of other institutions. The school has started correspondence courses to train students for examinations, organized by the Ministry of Finance.

The courses are on secondary and post-secondary school level, and are aimed at training professional skills. In these cources the following subjects are offered:

"droit constitutionnel, droit administratif, droit commercial, finances publiques, comptabilité commerciale, fiscalité, économie politique, géographie économique, mathématiques, mouvement national et français".

The annual intake of students is 600. At this moment the number of students is 515.

Overview of total enrolment is:

1970	150	–	1974	
1971	138	–	1975	120
1972	103	–	1976	515
1973	85			

The average age of the students is 20 years. The educational background of the majority is secondary education.

The activities of the Institute have expanded.

The total number of staff is 14; 6 teaching staff members and 8 administrative staff members.

Organization of the Institute

There has not been prepared a job description for the staff members, nor is there a daily routine for each section.

Finance of the Institute

The budget is completely integrated in that of the ENA. The Institute does not receive grants from the Government, nor from other institutional organisations. The students pay fees. The Institute is sponsored by the Prime Ministry. It gets some general support from the Friedrich Ebert Stiftung (W. Germany).

Counselling

The enrolled students are not counselled; there are no advisers available.

Students aptitude tests are not used.

The first enquiry of the students is made by letter. An information brochure for the students is available. This brochure contains general information, but has no subject content, nor a study programme, size of the lessons, or a method of how to study the lessons.

With the first lesson an instruction about returning assignments for correction is included. Communication is done only by correction.

Student administration

The students pay around 20 US$ for the course (15$ paid by the Ministry of Finance). These payments are recorded by cash register and by written receipt. The students pay their fees full on registration. Fees can not be refunded. The students are given a registration number and they have to put this number on all lessons and letters. They are enrolled in fixed enrolment periods.

Course production

The courses are written by the Institute's staff. These writers are outside specialists. They are experts in their subject. The writers are not briefed in techniques of writing courses. There are no discussions held between the educational supervisors and the writers. Before starting, however, the writers and the Head of the Teaching Department determine the syllabi. A manual to guide the writers is not available. The editors are permanent employees. They are not briefed on editing correspondence courses.

The courses are based on excerpts from prescribed books. The Institute uses textbooks and supplements them with test questions and test problems.

The languages used are French and Arabic. Principles of the Psychology of Learning and Teaching are not at all incorporated in the courses. Course material is not evaluated before issuing.

The introduction contains preliminary information, terminal learning objectives, and advice to the students. On enrolment the Institute sends small lesson units at a time. The courses do not have introductory surveys.

The lessons are published by the Institute. Use is being made of a letter press. The courses include diagrams and maps. The illustrations are prepared by the teachers. Essential words and phrases are underlined. No other media are utilized by the Institute. Programmed instruction is not used either.

The process of teaching

No instructional materials are sent to the students upon registration. No booklets of "How to study" the lessons are available, nor are the students advised about their performance on their written work. This written work is corrected by the tutors. These tutors are not trained teachers, but specialized in a particular subject. The tutors do not receive any training in the correction of students' work nor is a special tutor's manual available. The tutors are not spot-checked by subject supervisors. The lessons only give information and questions at the end of each lesson. There are no summaries of the lessons. The lessons stimulate students to trace information in books. There are no recapitulation chapters, nor self-check tests. The courses contain exercises, some prognostic tests and technical tests. But the use of all forms of tests is very limited.

The student receives constructive comments on his work. Extra instruction sheets or remedial work are not offered to students who show weaknesses in particular sections.

Other methods and media

No other methods are used; only the correspondence course. Nor are any other media used.

Examinations

Terminal examinations are held in the subjects mentioned before. The students sit for examinations set by a national council (Concours administrations). The students are given some training in examination experience by the exercises.

Student records

Correspondence with students is filed in archive boxes. Records of each student are kept; it is not a cumulative record.

Research

The only research done is a control on the number of students completing courses and the average completion time.

Postal procedures

Every two months the series of lessons are sent to the students. Form letters are used by the school. There are no records kept of the number of letters, etc. The postal services in the country are adequate; there is no need for other means of distribution. The Government has approved of special postal rates for the students' papers.

Miscellaneous

So far distant education has not been resisted. There is, however, need for promotional materials, such as sound cassettes. Letters from the students are read by experienced assistants. The School has no regular contacts with an overseas institute, and does not use courses from other institutes either. The School would like to have a strong liaison with an overseas institute, be it a government or a private institute. The reasons for liaison are: training of staff; financial assistance; professional assistance; development of courses and audio-visual aids.

The School prefers a liaison with an Institute in France.

Conclusions

The ENA is very lucky to have a staff of active, enthusiastic people. They all have a very good educational background. This is a very important basis for an improvement and extension of the system of correspondence education of the ENA. Next to this, however, the members of staff should get the necessary funds and training in order to be able to do their work with success. Both for the material side and for the necessary know-how in distant education technical assistance from "outside" is essential.

Recommendations

i) The content of the courses and books, published by the ENA is good. The structure, the pedagogical and didactical way of teaching by correspondence, however, is not sufficient. The writers show in their courses that they are experts in their subjects, but that they lack any training in the field of distant education techniques. The writing of correspondence courses is a special job, in which training is a necessity. Training in writing of courses is highly recommended;

ii) The Distant Education Unit of ECA has under preparation a correspondence course for correspondence course writers, of which 4 lessons have been presented to the ENA. It is highly recommended to study those lessons critically and if this course seems to be suitable for the purpose of training the ENA correspondence tutors to write to ECA.
The course is written in the English language. If the ENA has no possibility to translate it into French, please inform the ECA;

iii) It is recommended that statistics are prepared, especially on the progress of the students;

iv) It is highly recommended that a close co-operation will be established between the commissioning institution (i.e. Ministry of Finance) and the "executor" (the ENA);

v) It is highly recommended that the ENA develops strategies for a better contact with the students:

a. to find ways and means to stimulate writing by means of the answers of the students to the questions and the comments on this by the tutors;

b. through organising short residential courses 2 or 3 months after a course has started;

vi) It is recommended to include in the courses different forms of tests: e.g. diagnostic, prognostic and terminal tests; multiple choice, true-false, matching, re-arrangement and completion tests; self-check tests;

vii) It is highly recommended that an instruction for the students be prepared on "How to study the lessons".

LONG-TERM

viii) It is strongly recommended that the Director General requests the Executive Secretary of ECA for a follow-up mission in order, especially, to advise on course revision and to assist in the preparation of a Project Document for Technical Assistance, and to organize a workshop on techniques of correspondence course writing.

ix) It is highly recommended that on the basis of this request a Project Document for Technical Assistance be prepared.

The Distant Education Unit of ECA is willing to assist:

a. in advising on the content and structure of this document;

b. in identifying possible donor organisations.

Content of Project Document

a. Project Title;

b. Project Justification;

c. Project Objectives;

d. Plan of Action, including time schedule;

e. Tunisian contribution;

f. Technical co-operation Requirement;

g. Budget.

(Example, see: Multinational Programme).

x) It is recommended to include under Technical Co-operation Requirements:

a. An expert in distant education for 6-12 months (preferably in combinations with the ENA in Rabat);

b. Training of the Institute's staff in:

Course writing;
Course editing;
Psychology of learning and teaching at a distance;
Management and administration.

This training aspect has 3 components:

- training by the correspondence course (see Recommendations ii);
- training by the expert;
- training in overseas institutions (e.g. in France and preferably the Open University of England);

c. Replacement of stencil duplicators (2) and offset printer;

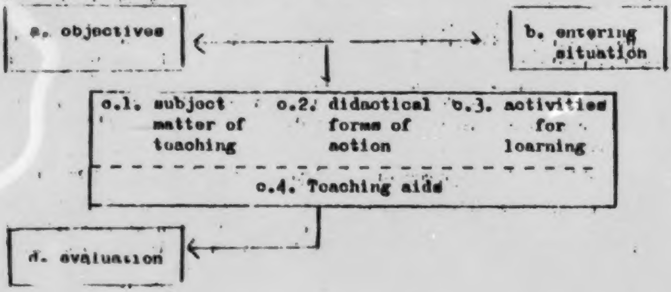
d. Travel funds for staff members to organize meetings with students up-country;

e. Funds for residential courses at the ENA and may be in sub-centres.

xi. It is recommended to consider if the use of audio-visual aids (e.g. cassettes) could mean a considerable improvement in the future of the study results.

xii. It is recommended that the above mentioned project document be presented by the Tunisian Government to a number of donor organizations.

xiii. It is recommended to use the following model during staff meetings and course renovation:


a. objectives
b. entering situation
c.1. subject matter of teaching
c.2. didactical forms of action
c.3. activities for learning
c.4. Teaching aids
d. evaluation

a. What do I want to achieve with my education? (Objectives);

b. Where am I to start? (Entering situation);

c. How can I teach?

  c.1. How do I have to choose and to arrange the subject matter? (Subject matter of teaching);

  c.2. Which didactical forms of action do I use? (Didactiacal forms of action);

  c.3. What kind of learning activities have to be executed by the students (Activities of learning);

  c.4. What kind of teaching- and learning aids do I have to use? (Teaching Aids and Media);

d. What are the results of my teaching ? (Evaluation).

3.18.4. Experiences in Botswana

Botswana Extension College (BEC) has a similar structure to the MAC in Mauritius and the LDTC in Lesotho. BEC began in 1973. It had a defined role to play with clearly specified activities responding to the needs of children who could not enter secondary schools. BEC set out to assist these persons. Students who went through their Junior College had no opportunities for senior secondary education. BEC was also charged with using distance education methods to reach rural people in the improvement of skills and standards of living. BEC has had a major staffing problem, and did not send out courses until at least 1975. Course writers and tutors were hard to aquire since secondary school teachers were not allowed to take part-time jobs, although this has now changed, subject to some constraints. The initial task was to produce courses for the Junior Certificate. They also borrowed courses at GCE "O" level from the NEC (UK) and Zambia. There was too co-operation with Lesotho. BEC now has at JC and GCE level 3.5oo students, but staff shortages have meant student numbers have had to be constrained. BEC has used stands at all Distrivt Agricultural Shows to publicize its work, and demand is greater than the number of places. BEC uses radio co-operating closely with radio Botswana, which is involved in determing transmission times. The Regional Co-ordinating Committee also helps develop BEC an the formal side. On the non-formal side, a fruit and vegetable growing course was prepared for school children - to occupy them in their after school hours. They have too courses on poultry and grazing policy, use of libraries, village development, and a response to open-ended questions from the public on any subject not of a politically delicate nature.

Distance education in Botswana is not confined to formal subjects. Non-formal education has been most successful, and it is high time the possibilities of using distance education in non-formal areas is explored. BEC has had, for example, a pilot literacy programme, and plans a national programme for the coming year.

In this connection it is relevant to include the following paper:

3.18.5 Exploiting the Potentials of Distance Learning in Adult Education

1. Correspondence education is well known thoughout Africa. Yet it is neither fully accepted nor fully exploited. Much of the correspondence education is imported. Africa, in keeping with its image as the damping places for goods and services of the industrialized west, is considered a lucrative market. Education is another commodity for sale and Africa a buyer. As the size and volume of the market expanded the foreign schools opened subsidiary branches here and there, and continued to sell their out-dated, irrelevant commodity. The commercial schools are guilty of perpertuating the idea that the method or the approach was solely amenable to formal courses, that is courses that lead to examination and paper qualifications. They kept on dishing-out meaningless Diplomas and Certificates. The training in skills is almost totally negleted.

   In recent years Governments, through their ministries of Education and/or their Institutions of Higher Learning, have started to use correspondence education. Again in most cases the emphasis is on formal courses, which is a carry-over from the commercial correspondence schools and the school system.

   What-is-more, despite the public financing of such schools, it is seen in isolation from the total effort on education, and considered secondary to the traditional approach. Never-the-less the commitment in those countries is irreversible.

2. The Changing Cencept

   The choice of the words Distance learning as against the traditional designation of correspondence education is not without significance. The old name emphasised learning based on written materials only, while with the present designation the emphasis is on a combination of media. Distance Education is sometimes called the three way teaching, because of the combined use of the printed materials, radio, television or the tape recorders, and some face to face instruction. This stems from the realization on the part of educators, of the limitation of the traditional dependence on printed materials only.

   Furthermore, in recent years there has been a deliberate shift from the traditional emphasis on formal courses only to include all aspects of adult education, particularly non-formal education.

Distance Education in non-formal Education was pioneered in Africa by INADES, which was initially based in Abidjan, the Ivory Coast. INADES has used Distance Learning methods since 1962 in the socio-economic development of rural people in Africa. Its targets audience were the subsistence farmers, the village women, and development leaders in brief the rural poor. INADES extended its out-reach to a number of African countries including some Anglophone ones. This idea was further given a boost with the assistance of the International Extension College what helped Mauritious, Lesotho and Botswana to start college of Distance Learning. The experience of Botswana will make the main subject of this paper.

Who uses Distance Learning?

We find that distance learning, like all forms of education is highly developed in the industrialized world. Its use ranges from primary to tertiary education, and in diverse area of non-formal education. Such countries as Sweden have used Distance learning for decades to provide formal education to children in scattered homesteads where it has not been economical to establish a school, nor provide transport to the nearest school. Distance Learning method has been used in providing education and training in a diverse of techical; and professional skill, in the socialist countries, transforming those community educationally beyond recognition. The recent development in Distance Learning in the Open University in the United Kingdom, and other institutions, like it the world over are examples of opening up what was the mainstay of the selected few to the masses. This enabled thousands who otherwise would not have been able to pursue higher education to do so.
Finally Distance Learning is being extensively employed in the inservice training and the countinous up-grading of personnel in all walks of life. In Africa it has proved useful in the inservice-training of teachers. As of late Tanzania is employing the method in the pre-service training of teachers to meet its massive manpower requirement for the proposed universal primary education. These and other uses of Distance Learning have shattered the myth that education could only take place in the confines of the school building and with a teacher, in a face to face situation. Research after research has proved that the method is as effective as the traditional approach while at the same time being less expensive.

4. The Botswana Experience:

Botswana Extension College was first established in 1973 to , "Use correspondence courses, radio and face to face methods to teach a wide variety of subjects, including subjects leading to formal examinations, courses of up-grading and retraining, leading to promotion or salary advances, and informal courses not leading to examinations". This is a very wide charge, and through the years the college has strived to live up to it, although not always successfully. The International Extension College has been instrumental in formulating the course of events that were to take place in the college. I shall deal in the following paragraphs with the experience of BEC briefly and give an example of one of our NFE programmes.

4.1 Formal Courses This is an area of education that is usually easier to handle, since a wealth of experience already exists, and since the target audience is generally clearly defined and easier to identify and approach. People who have been to school in recent years seem to seek and are still seeking ways and means of continuing with their education. This is especially true of those who are in employment where years of schooling affects their standing and their income.

Developing relevant courses, at the JC and GCE 'O' levels, although nowadays not too difficult requires manpower. A small school such as ours had two options for staffing open to it; either expand the size of the professional staff rapidly or utilize part-time course writers. The first preposition, although the most practical of the two, was not easy to implement because it meant rapid growth and fast rate of increase of the financial outlay. We chose the latter. Yet, looking backwards we would say that it was a wrong decission precisely because the pool of potential people from whom to draw part-time course writers was too small. This might work in a large metropolis where there are great many secondary schools. There were only two secondary schools in the immediate environment of BEC and most of the teachers were not looking for extra income. Furthermore there were technical barriers stoping them from getting extra income. However, we were able to gradually develop some courses and enrol students, but it was a slow process. Our first decission not to employ full time Course Development Officers is also proving to be limiting in the recruitment and supervision of marker-tutors. Our enrolment currently stands at about 3,500 while the largest secondary school in the country has a little over 1000 students. Yet, its full complement of teaching staff is 48 while ours is less than ten not to mention the disparity in budget. If we had the size of staff of a single secondary school, we could carry as many students as there are in all the secondary schools in the country and Botswana output of secondary school graduates could be easily altered.

The approach we have chosen in giving formal education is the three ways teaching. Students receive printed lessons, supplimentary lessons are broadcast over the radio, and face to face instruction is provided in the form of study centres and weekend courses. Currently we are transcribing all radio programmes on tapes and making these available at the study centres for student use. This has yet to develop. We have also introduced a postal library of which students are making an extensive use.

The question is how do you measure success in such a programme. Is the size of enrolment in itself an adequate indicator? or success in examination is a better indicator? In countries where many of the school leavers are not finding jobs, is there a need to expand secondary education through the Distance Learning Method?

Botswana has shortages in manpower at all spheres. The reason behind the shortage is often given the inadequate number of secondary school graduates, which makes the pool from among whom selection and training is carried out. Thus a college as BEC and its work in the formal course becomes all important when the nation is striving to increase the out-put of trainable manpower, and to raise the general educational atainment of its people. These courses in addition to increasing the pool of manpower help to constantly up-grade those who are already on service.

The success of such a school as ours is difficult to asses. Pass rate could be used as indicators. In the past we had difficulties in obtaining the results of our students. But now we have concluded the necessary agreement with the Examinations Council for the proper identification of our students. The first report that we were able to review indicates that the performance of our students is comperable to that of the public secondary school completers. However much more concrete information could come only after the analysis of results for a couple of years or more. Indications from other parts of the world are that correspondence students results compare favourably with those of regular secondary schools. Added to this the low cost per student makes Distance Learning a viable proportion for any country to pursue.

4.2 BEC materials do also help the regular secondary schools as resource materials. We supply all secondary schools with our reading cards which are modelled after the SRA cards, but based on relevant date. (appendix five). Similarly we are producing reading cards for primary schools.

4.3 Non-Formal Education

It has been pointed out earlier that those subjects that lend themselves to examination and paper qualification make the real core of the offering of traditional correspondence schools. When Botswana Extension College was first established one of the charges was to develop those areas of learning that do not necessarily lead to paper qualification but will enhance the quality of life. To this end the college sought ways and means of helping different target groups. Among these are the 4B - Clubs - a farm youth club, the Village Development Committees, Extension agents, the rural women, and the District Councils. BEC's activities in this area could be summarized as:

a) Material design and development. This would be on topics of interest to the specific target groups - e.g. Fruit tree growing or Poultry raising for the 4B - Clubs, a course on Map-reading for the Extension Agents who were to take-up a new responsibility requiring this skill or making an oven from a parafin tin for rural women.

b) Designing and developing a delivery method for the materials developed. In other words how do you reach the target audience. This could mean organizing radio learning groups using the materials and suplimentary broadcast, or it could mean the training of and supplying of materials to prospective leaders - who in turn will go out and teach others of what they have learnt. Or it could be conducting a radio programme on the topics and letting the public know what services exist within the College. This last approach usually attracts hundreds of letters from clubs, women's groups, charitable organizations and individuals for single or multiple copies of the literature covered on the air, or questions that have to be answered over the air or by letter.

c) Assisting organizations to carryout a specific task - such as organizing a conference and evaluating their activities, or designing materials for a specific purpose.

Let us take the example of our home economics programme for women.

4.4 Ditiro Tsa Ditlhabololo (DtD) (Skills for Development) Is one programme directed at women that gives a clear picture of what BEC activities in NFE are like. The programme is described here in its two phases - an experimental phase and the post experiment approach that we have chosen.

a) Phase One

This was an experimental period that lasted for a period of 18 months. It was based on the following simple assumptions: Small communities have 'natural leaders' who are respected, and who because of their status and their knowledge of the basic skills of reading and writing, could be used as volunteer change agents.

Secondly the material could be designed in such a simple manner that those selected as leaders could easily assimilate it, and pass it to others.

Thirdly 'natural leaders' will learn one simple concept or related concepts during a face to face training usually lasting two to three days and pass this to thier neighbours, club members or any other women in their community over a period of approximately one month. This could be repeated without too much turn-over of volunteer leaders.

The question arises who are these 'natural leaders'? How do you go about identifying them? Before we could answer that question we had to select and delimit our area of operation. It had to be near enough and small enough for our small staff to monitor regularly and give such on the spot assistance as is required. We chose the four villages that are closest to Gaborone. In selecting the 'natural leaders' we consulted with the extension agents especially the Assistant Community Development Officers (ACDO's) and the Family welfare Educators. They, by virtue of having lived long in the community and being in constant contact with them, were able to select five to seven leaders from each village.

The topics on which teaching materials were to develop had not only to be relevant and of interest to the target audience, but they had also to be within their reach. Take the example of cookery. We could develop recipes that require things beyond the reach of a rural family. Things had to be within their means. The style of presentation is kept simple so that the barely literate or even the illiterate participant could understand it. Selection of topics was innitially done in consultation with those chosen to act as change agents. Material design and development including field testing was carried out by BEC staff, and whenever necessary the relevant agencies were contacted to varify the accuracy of the content.
(See appendices 1 and 2 for sample cards and appendix three for the complete list of materials produced for this programme) As you can see there are four broad areas covered, food and nutrition including cookery, child care, dress making including knitting and some simple house hold equipments. When applicable large posters were developed for displaying in public places, such as the maternity clinics. (A reduced version of one of the posters is included as Appendix four). The result was interesting. The materials were comprehensible to the target audience with the exception of a few of the drawings. Extension agents who saw these materials requested copies in large numbers and started using them in their work, thus opening an informal avenue for their use.

b) Phase two was a direct result of the positive reaction from the extension agents and such charitable organizations as Churchs and women's groups who expressed the desire to use our materials in their work. It was also the result of our wish to proceed from a limitted experimental work to a programme of national scale. Phase two could be divided into three areas. BEC could not handle the training of the village level leaders from the whole country. It had to change the approach from the monthly direct training of leaders to the training of trainers. Each major national organization, District or Village choses prospective trainers who are better equiped educationally. These trainers are trained by BEC at a bi-monthly training and go back to their stations and conduct training of the leaders. They also help BEC monitor the work of the village level leaders, and act as contact for BEC materials.

The second approach is the use of radio to publicise and discuss the DtD materials on a weekly radio slot. The staff in charge of the programme discuss aspects of this programme, and informs the general public on what is available and how to go about requesting for materials. In the course of the last 15 months over 2300 letters have been received requesting either simple copies or multiple copies of the DtD materials. The requests come from local women's clubs such as the YWCA and BCW, the Red Cross societies, extension agents from all over the country, school teachers mission and church organizations. People in the neighbouring countries who speak Setswana also requested and received DtD materials.

The third method is to work with government agencies. This involves among other things providing training in the use of the DtD materials, and bulk supplying them with the materials. One such agency with whom we have had a fruitful cooperation is the Nutrition Unit of the Ministry of Public Health. Many of their field staff have been trained in the use of BEC materials and are using it in teaching the public about good feeding habits, especially when they hold clinics for mothers.

5. This has been a summary of what goes on at BEC. The topic suggests that we should exploit Distance Teaching method. The reasons are very simple.

Providing formal education is expensive both in terms of manpower, and capital outlay. The same resources could assist far more people if used in a Distance Learning manner. Most traditional education facilities are idle after school hours, evenings, weekends, and during the school holidays, some of which stretch over a month. This applies to secondary schools, vocational and Technical Colleges, and all institutions of higher learning. It is further impractical to continue to expand these facilities.

Distance Learning approach could be used to provide academic education, vocational and professional training and tertiarry education with little addition in manpower, if we were to avail existing facilities for use by students of Distance Learning colleges. This will ensure that we can give the necessary practical experience, and also conduct the necessary but limitted face to face instruction.

Distance Learning approach could be further exploited to give sound education to the rural masses. It is especially useful if it is introduced as a sequell to a literacy campaign. Farmers could learn much more about agricultural science, home economics, management, and various skills that will add to the betterment of life. It seems that group learning using printed materials, radio or cassette recorder, and some face to face instruction shows positive results. This has been the case with the radio farm forum in Canada, India, Ghana and elsewhere. This has been the case with the health campaign in Tanzania. We believe it is the case here.

Let us use Distance Learning method to provide all forms of education. Let us make all the facilities, our schools, colleges, and training centres available to Distance Learning Colleges. We can teach almost anything if all facilities and workshops were available for use by our students. Finally Distance Learning methods should be used to provide all forms of education to serving officers. This could be providing further education in their chosen profession, introducing them to new policy and practice or retraining them for a new job.

will need: Appendix One

MAIZE MEAL PORRIDGE WITH GROUNDNUTS

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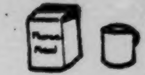
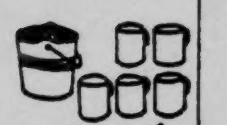
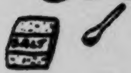
cup maize meal



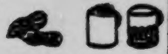
cups water



teaspoon salt



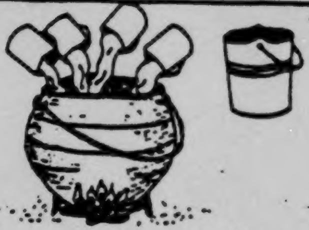
$\frac{1}{2}$ cups groundnuts



Variations

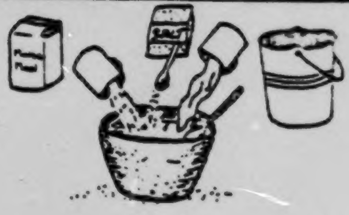
1. Add a little sugar when the porridge is cooked.
2. Use mashed beans instead of groundnuts.

1.



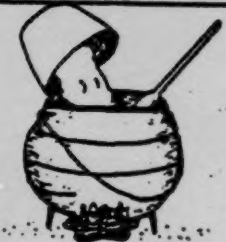
Put 4 cups of water in a pot to boil.

2.



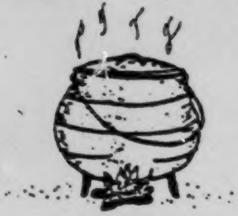
Mix the maize meal and salt with 1 cup of cold water.

3.



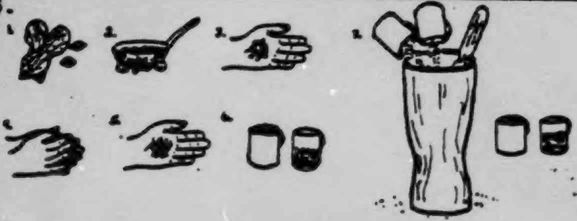
Add the mealie meal mixture to the boiling water.

4.



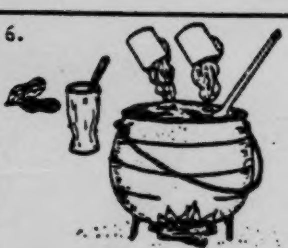
Cook about 20 to 25 minutes.

5.



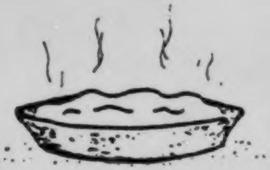
ound the groundnuts which have been roasted and peeled.

6.



Add the pounded groundnuts to the cooked porridge.

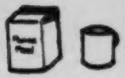
7.



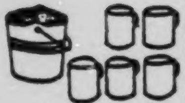
Serve hot.

tla tlhoka

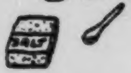
pi ele nngwe ya phaleche



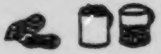
pi tse tlhano tsa metsi



swana le le lengwe la
la letswai



pi le sephatlo ya manoko



kgwa mengwe

Tsenya sukiri e nyennyane fa bogobe
budule.

Dirisa dinawa tse di ritilweng boemong
manoko.

BOGOBE BA PHALECHE LE MANOKO

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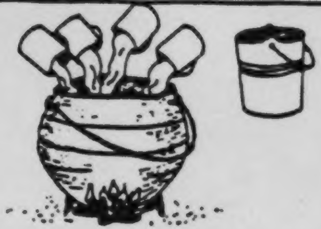
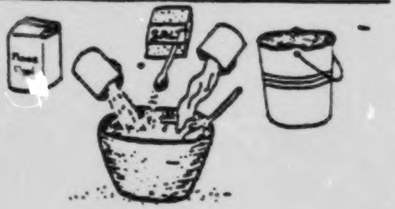
1.



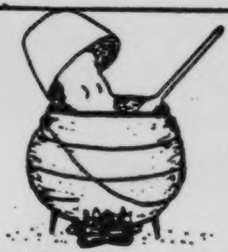
Tshela kopi tse nne tsa metsi mo pitseng gore a bele.

2.



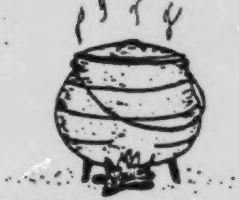
Tlhakanya phaleche le letswai le kopi ele nngwe ya metsi a a tsididi.

3.

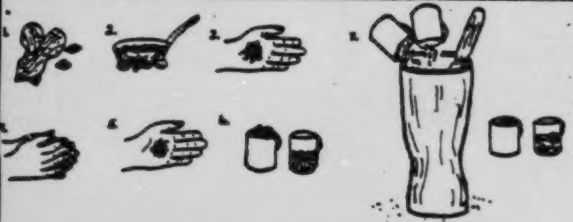


Tsenya phaleche mo metsing a a belang.

4.

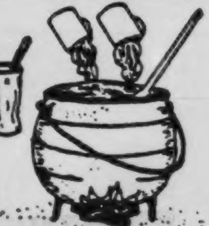


Apaya lebaka la metsotso e e masome mabedi go ya go e e masome mabedi le botlhano.



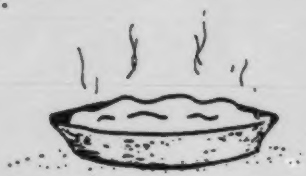
Sila manoko a a gadikilweng a ba a oholwa.

6.



Tsenya manoko a a sitsweng mo bogobeng bo bo apeilweng.

7.

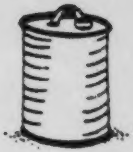


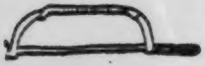
Tshola gole molelo.

ppendix Two

ou will need:

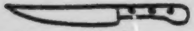
n empty paraffin tin





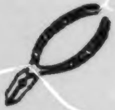
hack-saw

OR

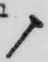


a heavy knife

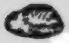
pair of pliers
(if you have them)

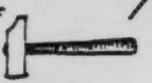


a nail



stone OR a hammer





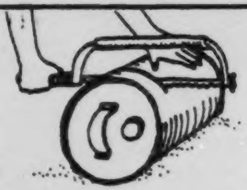
ote:

If you do not have a pair of pliers you can leave out steps 2 and 3. Just be careful of the sharp edge when you use the oven.

Making an Oven from a Paraffin Tin

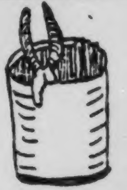
VHAL 11

1.



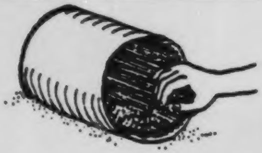
Cut the paraffin tin about 4" from the top, with a hack-saw or a heavy knife.

2.



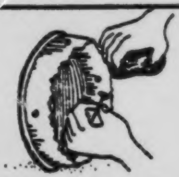
Turn in the sharp edge with a pair of pliers.

3.

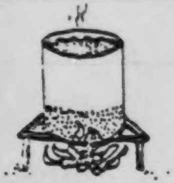


Flatten the edge with a stone or hammer.

4.

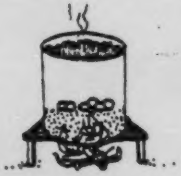


Punch 4 holes in the lid with a nail and a stone or a hammer.



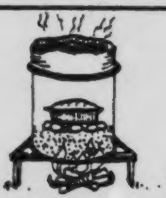
Put sand in the bottom of the tin and heat until hot.

6.



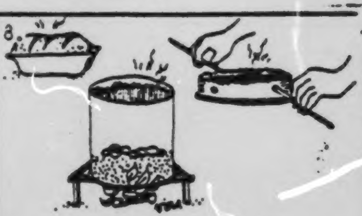
Put a few small stones on top of the hot sand.

7.



Put the pan with the dough in to bake. Put hot ashes or coals in the lid.

8.



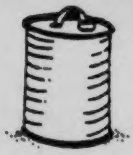
Use sticks to remove the lid when you are finished baking.

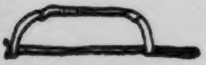
Go rira Honto ka thini ya parafini

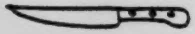
VHAL 11

[illegible]

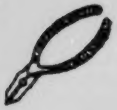
hini e tona ya parafani e e
nang sepe





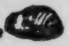
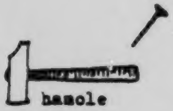


haga kana thipa etona e e bogale



inipitana ha o na nayo

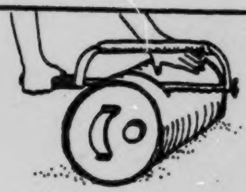
epekere

entswe  KANA 

emoga Se:

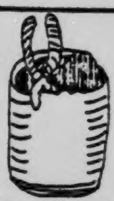
a o sena kinipitana tlogela
ela mme o tlhokomele tini
seka ya go sena.

1.



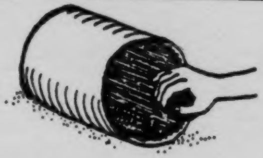
Kgaola thini selekanyo sa (4ins) go tswa ko godimo ka shaga kana thipa e tona.

2.



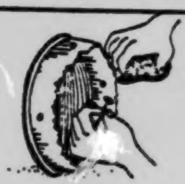
Konela bogale jwa thini moteng fa e shagilweng teng ka kinipitana.

3.

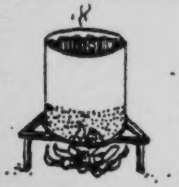


Rethefatsa ka lentswe.

4.

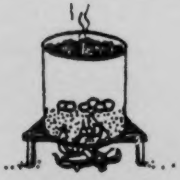


Phunya maroba ale mane mo sekhurumelong ka sepekere o se itaya ka lentswe kana hamole.



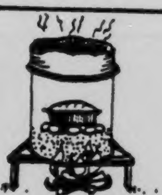
shela motlhaba mo thining
bo o baya mo molelong go
itlhelela o fisa.

6.



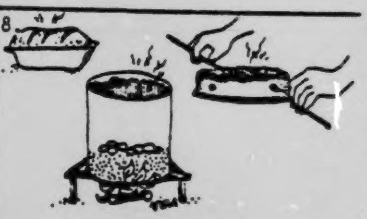
Baya mantswenyana ha godimo ga motlhaba oo fisang.

7.



Tsenya pane e e nang le borotho mo teng go apaya. Tsenya kupa kana magala aa molelo mo sekhurumelong.

8.



Dirisa dikgonyana go tsholetsa sekhurumelo fa o tlhatlola.

LIST OF DtD MATERIALS.

Appendix Three

COOKERY AND NUTRITION

Nutritious Relishes

Relish from Dried Green Leaves	DtD 1
Relish from Fresh Green Leaves	DtD 2
Making a Hot Box	DtD 3
Bean Flour	DtD 4
Bean Relish	DtD 5
Storing Beans for Home Consumption	DtD 6

Cooking and Baking of Local Foods

Maize Meal Bread	DtD 7
Sorghum Bread	DtD 8
Bean Bread	DtD 9
Bean Patties	DtD 10
Making an Oven from a Paraffin Tin	DtD 11
Teaching Guidesheet: Cooking and Baking of Local Food	

Meals for Your Family

Enriched Sorghum Dish	DtD 16
Pumpkin with Beans	DtD 17
Pumpkin Fritters	DtD 18
Curried Chicken	DtD 19
Teaching Guidesheet: Meals for your Family	

Proteins without Meat

How to Grow Groundnuts	DtD 20
Groundnut Paste	DtD 21
Groundnut Bars	DtD 22
Groundnut Bread	DtD 23
Maize Meal Porridge with Groundnuts	DtD 24
Maize with Groundnut Patties	DtD 25

Groundnuts with Sorghum

Sorghum and Orange Cake	DtD 26
Sorghum and Groundnut Pancakes	DtD 27
Groundnut Soup and Sorghum Dumplings	DtD 28

Eggs in Cookery

Egg flip	DtD 30
Curried Eggs	DtD 31
Green mealies and Egg Salad	DtD 32
Eggs in Onion and Tomatoes	DtD 33

The Food We Eat Booklet

Offal Dumplings	DtD 34

Jam Making

Pawpaw Jam	DtD 35
Banana Jam	DtD 36
Orange Marmalade Jam	DtD 37

Storing Vegetables

How to dry Spinach	DtD 38

Practical Advise

Soap Jelly	DtD 39
Candle Polish	DtD 40
Laying A Table	DtD 41

CHILD CARE

Mother's Milk is Best	DtD 12
Good Food Makes Plenty of Milk	DtD 13
If You Must Bottle Feed	DtD 14
Bathing your Baby	DtD 15
'Weaning'	A Booklet
Teaching Guidesheet: Child Care	

NOTE: DtD 12 to 15 are also available as large posters.

SEWING

Patterns accompany the following b booklets:

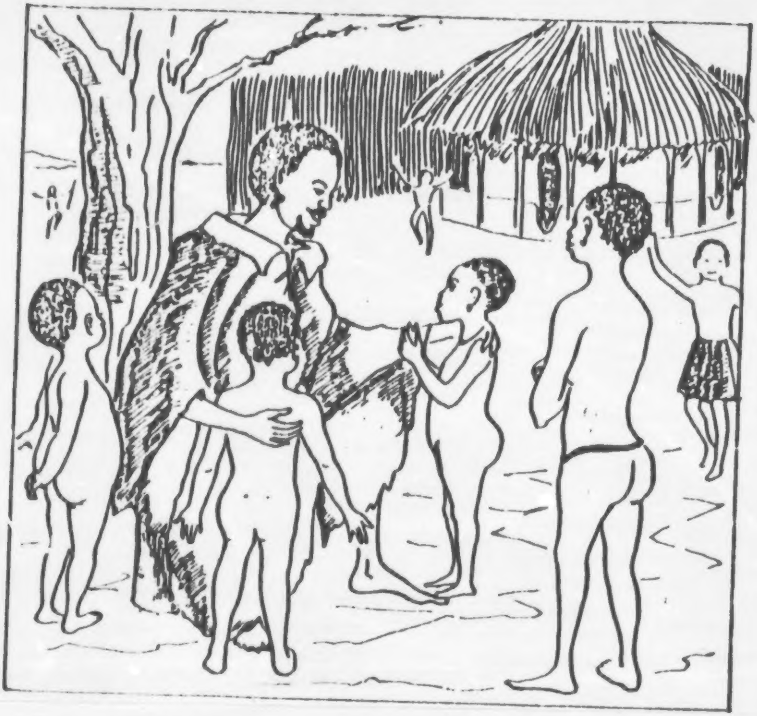
How to Make a Pair of Children's Shorts	DtD 101
How to Make a Child's Dress	DtD 102
How to Make a Child's Pair of Panties	DtD 103
How to Make a Skirt	DtD 104
How to Make a Boy's Shirt	DtD 106

KNITTING

How to knit a hat	DtD 105

If you wish to receive any of these materials, write to:

DtD programme
BEC
Private Bag 0043
Gaborone



AN AFRICAN SAGE

1. Mohlomi lived in Southern Africa 150 years ago. During his lifetime, the tribes of Southern Africa were fighting each other. But Mohlomi, who was a chief, never made war.

2. He was a great traveller. But it was difficult to travel in times of war. People mistrusted stangers. They thought they were spies from an enemy tribe. So they often murdered them. But Mohlomi was able to travel unharmed from one tribe to the next. In a time of fighting between tribes, he believed in friendship between tribes.

3. Some of his methods were odd. In every tribe he visited he used to choose a wife. He paid the bride-price and got a house for her. Then he left her behind among her own people, and travelled on. In this way, he made alliances. If he returned to that tribe, she would welcome him. In order to marry such a wife, he had to learn the customs of that tribe. Once he found a tribe which paid the bride-price in dogs. But he stayed with that tribe until he had earned enough dogs. And so he earned his wife.

4. In later life, many chiefs used to ask his advice about their inter-tribal quarrels. Mohlomi always advised them to love peace. 'It is better,' he said, 'to thresh corn than to sharpen the spear.'

5. After his death, his wife revealed that Mohlomi had had a dream when he was a boy at the initiation school. He had heard a voice from the sky saying, 'Go rule by love. Look on people as men and brothers.'

6. He ruled his own people with fairness. He decided cases with justice. He helped the poor. He loved children.

7. He didn't believe in the powers of dingaka. He never threw bones. He did not need to find out secret things by that method. Once the young Moshoeshoe visited him. he asked,

> 'What gives you your power over men? Is it medicine?'
> 'Power is not gained by medicine,' replied the sage.
> 'The heart is medicine.'

8. Later, when Moshoeshoe was emerging as the leader among the Basotho, he again consulted him. Mohlomi foresaw that Moshoeshoe could be a great ruler. So he advised him, 'one day you will rule men. Learn then to know them. And when you judge, let your judgement be just.' Moshoeshoe accepted this advice. He spent many hours in lekgotla. He observed men carefully. In later life, he was a good judge of men's characters. He could read the secrets of their hearts.

9. Moshoeshoe also imitated Mohlomi's love of peace. He became a great chief of the Basotho. He could defeat enemies. But he always preferred to make alliances rather than to make war. A tribe does not become great by making enemies: a tribe becomes great by making friends. Strangers could always pass unharmed among Moshoeshoe's people. He united the scattered Basotho tribes into one nation. By negotiations rather than by war, he saved the nation in troubled times. Basotho can be glad that Moshoeshoe learned peace and justice from this great and half-forgotten African sage, Mohlomi.

HAVE YOU UNDERSTOOD?

INSTRUCTION: Write down the number of the question and the letter which is opposite the correct answer.

e.g. 28. C

1. In Mohlomi's time it was dangerous to travel because
   - A people used to kill travellers.
   - B there were many spies from enemy tribes.
   - C there was always fighting.
   - D the tribes made war on each other.

2. He used to marry a girl from each tribe he visited in order to
   - A have many wives.
   - B learn the customs of that tribe.
   - C make an alliance with that tribe.
   - D have a house with each tribe.

3. Mohlomi always advised chiefs, who consulted him about their quarrels, to
   - A marry more wives.
   - B sharpen their spears and thresh corn.
   - C make peace.
   - D have a house with each tribe.

4. He heard a command from the sky, in a dream
   - A when he was still a boy.
   - B when he married his first wife.
   - C after Moshoeshoe had visited him.
   - D at his death.

5. He did not consult the dingaka because
   - A he knew all about medicine.
   - B he understood people.
   - C he knew the characters of dingaka.
   - D he threw bones himself.

6. After Mohlomi had advised Moshoeshoe, Moshoeshoe
   - A defeated enemies.
   - B observed the characters of people carefully.
   - C didn't believe in dingaka any longer.
   - D made war on neighbouring tribes.

7. Moshoeshoe learned from Mhlomi to make peace by
   - A marrying foreign wives..
   - B becoming a great chief of the Basotho.
   - C making alliances.
   - D protecting strangers.

DO YOU KNOW THESE WORDS?

INSTRUCTION: Write down the number of the question and then the word from the passage that fits the blank.

8. The dog had a wild look and people - - - - - - - - - - - it, so they chased it from the village. (para 2).

9. The chief learned from his s _ _ _ _ that the enemy was planning an attack. (para 2).

10. He married the chief's daughter and so made an _ _ _ _ _ _ _ _ with that tribe. (para 3).

11. The two brothers hated each other and had many _ _ _ _ _ _ _ _. (para 4).

12. That tribe still performs the _ _ _ _ _ _ _ _ _ _ ceremony on boys to teach them how to behave when they are men. (para 5).

13. The boy was _ _ _ _ _ _ _ as the best footballer in the school. (para 8).

14. Because he _ _ _ _ _ _ _ his father, the boy became an excellent hunter. (para 9).

15. He _ _ _ _ _ _ _ two political parties to form the Progress Party. (para 9).

16. The new government, not wanting to continue the war, started _ _ _ _ _ _ _ _ _ _ _ _ with the enemy leaders, but unfortunately could not reach agreement. (para 9).

17. That old man telling stories is very wise; in fact, you could call him the _ _ _ _ of our tribe. (para 9).

SENTENCE STRUCTURE

INSTRUCTION: Write the underlined verbs in the Present Tense.
e.g. 24. He saw the army as it marched towards him.
Answer: 24 sees, marches.

18. But Mohlomi, who was a chief, never made war. (para 1).

19. Mohlomi always advised them to love peace. (para 4).

20. He could read the secrets of their hearts. (para 8).

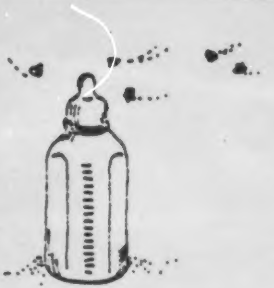
INSTRUCTION: Write down the number of the question and beside it the underlined word and the word which goes with it.
e.g. 25 Don't stop studying now but carry ___ until you pass.
Answer 25. carry on

21. He left his horse __________ and continued on foot. (para 3).

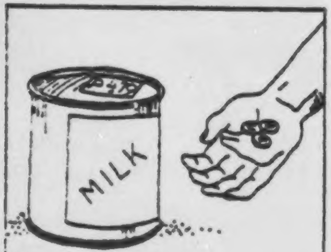
22. The boy grew up in that family, and looked ___ the old people as his parents. (para 5).

23. She tried to find ___ where the child had hidden the scissors. (para 7).

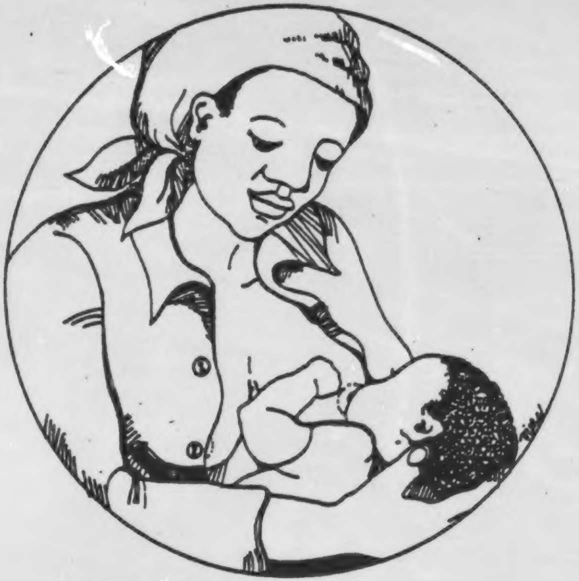
MOTHER'S MILK IS BEST



It is easy for bottles to get dirty.



Buying milk at the shop is expensive.

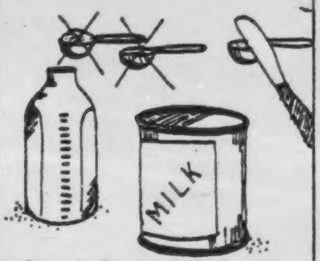


Mother's milk is clean.

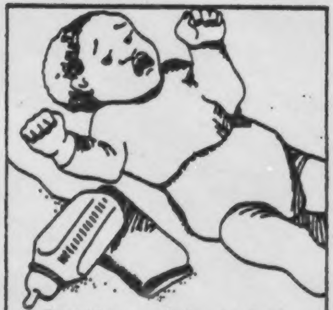
You do not have to buy mother's milk.

Mother's milk is mixed just right for baby.

Breast feeding makes the baby feel loved and secure.

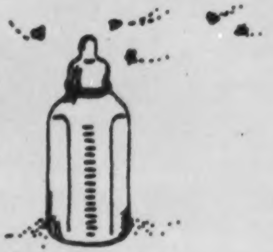


Some mothers can't read. They don't mix the milk correctly and the baby can become ill.

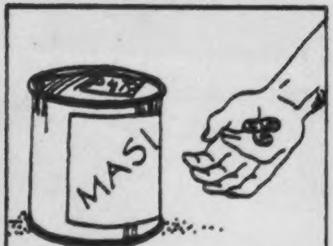


Sometimes a baby is left to feed himself and he will not feel loved and secure.

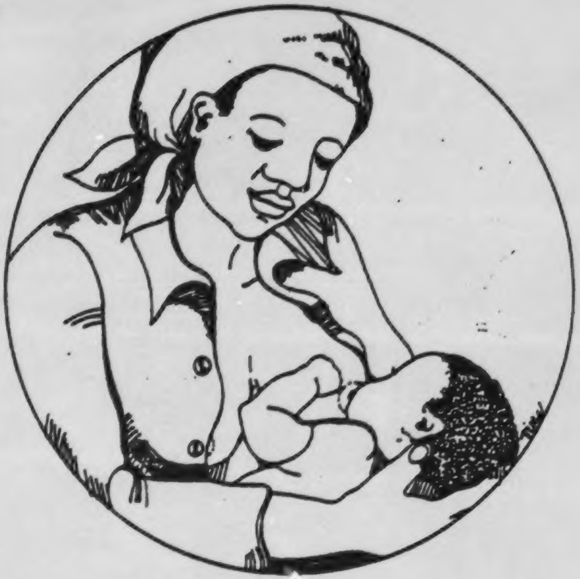
MASI A LETSELE A MMANGWANA A GAISA TSOTLHE



Go motlhofo gore mabotlolo a leswefale.



Go reka masi kwa mabentleleng go bolaisa theko.

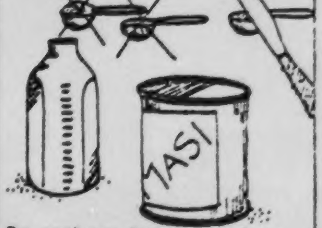


Masi a letsele a phepa.

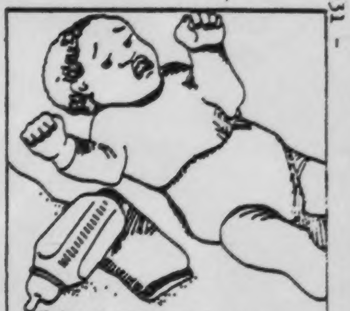
Masi a letsele go rekwe.

Masi a letsele ke motswako o o siametseng ngwana.

Ngwana yo o anyang lebele o ikutlwa a ratwa e bile a babalelwa.



Bo mmabana bangwe ga ba itse go bala. Ba a fosa fa ba tswaka maswi a ngwana, mo go ka mo lwatsang.



Nako e nngwe ngwana o tlogelwa a ikamusa a ba a ikutlwe gore ga ratwe le gone ga babalelwe.

3.18.6. Distance Education in Ghana

One aspect of correspondance education - the student - was focussed on. The student is at the heart of the system, and we need to know something about him. There is a principle that programmes should meet the students' needs, and that where there is a correlation between student's needs and programme objectives, there is a high success rate. If there is high drop-out or failure, it could be that our programmes are wrongly conceived. We need to conduct surveys of student's needs - ideally - before the programme began. Ghana was not able to do this. Ghanaian correspondence students are young married males with 2 children, working in white collar occupations, working to help their careers and using correspondence to be able to continue to work. They live in rural areas, and bear the cost of the programme themselves.

The sex of the students is predominantly male (9o%) as against a more equal distribution of sexes in the UK and the USA. This is not surprising, reflecting the sex distribution of formal and non-formal education at all levels. Thus, at primary level, 56% of children are male rising to 87% at university level. The under-representation of the female in the school system is culturally related. African parents were against formal schooling which seemed to undermine the tradition and culture of the home. Slave children and naughty children rended to go to be picked for school. Later, with acceptance of schooling, it was the male who went to school - particularly in matriarchal societies such as those in Ghana, where the place of the woman was seen to be in the home. There was an economic factor, too. School fees were paid by parents. With large families, parents had to select from their children - particularly in polygamous families.

What are the implications of this under-representation of the woman? Woman will play little part in national development or society. There will be an educational gap between them and their husbands or sons within the family. Occupations like nursing (normally female) will be short-staffed, and male values will predominate. There is need to recognize the equal importance of female education - but to encourage female enrolment, appropriate courses should be encouraged.

Dr. Ansere had produced a paper on this topic, which we include in this report:

PAPER PRESENTED TO THE INTERNATIONAL SEMINAR
ON DISTANCE EDUCATION IN ADDIS ABABA, ETHIOPIA
3-15 SEPTEMBER, 1979.

3.18.7 A Profile of Correspondence Students in Ghana

By

Dr Joe K Ansere (Ghana)

1. INTRODUCTION

The new approach in education is to place the interest of the learner above the interest of the teacher or the interest of the institution that offers the programme. What this means is that in the provision of educational programmes, the nature of the learner, what he wants to learn and how he wants to learn become the more important considerations than what the teacher wants to teach or the requirements of the institution. This principle applies to both formal and nonformal education, or perhaps more so to the latter than to the former in view of the nature of the learners involved. In order to provide a learner-centred educational programme, it is necessary that we should know who the learners are. This paper attempts to describe the characteristics of a group of adult learners in Ghana, namely, the students who have enrolled in the correspondence education programme offered by the Institute of Adult Education, University of Ghana.

Paradoxically, the study was undertaken after the correspondence programme had been established and the students had already embarked upon their study. Ideally the study should have come before the programme, so that the findings of the study could be used to determine the format of the programme. But although the study could not be used to influence the beginnings of the programme, its results have extensively been used in the later development of the programme. For example, with a clear knowledge of who the students are, we have been able to revise the lessons to make them more relevant to their needs and background, and have been able to counsel and guide them more effectively than would otherwise be the case.

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1. J.K. Ansere, Characteristics of Correspondence Students in Ghana. A Dissertation for Ph.D., University of Wisconsin, Madison, U.S.A., 1976. (Unpublished).

2. THE SCOPE OF THE PAPER

There are three main sets of things that can be learnt about correspondence students as about any other group of students. One set relates to the biographical details of the students, such as were documented by James and Wedemeyer,[3] Johnstone and Rivers,[4] and McIntosh,[5]. The other set relates to the socio-economic status of the students such as was written about by Monstross,[6] Kempfer,[7] and Cross, Valley and Associates[8]. And the third set relates to the psychological or personality traits of the learner, such as his degree of independence and his level of motivation and persistence. The persons who have done work about these are Torstein Rekkedal[9] and Michael Moore,[10] to name but a few. This paper will cover the first and second sets of characteristics.

Although the title of the paper is "Characteristics of Correspondence Students in Ghana" it does not deal with all types of correspondence students in the country. It deals with only those students who are enrolled in the correspondence education programmes provided by the University of Ghana's Institute of Adult Education. It leaves out of account students who are engaged in courses offered by overseas correspondence schools.[11] The proportion of correspondence students who are undertaking overseas courses is in any case too small for their exclusion to have much effect on the general situation. The records show that in 1975, only one in every 50 correspondence students in the country was enrolled in an overseas course.[12] The proportion is bound to become smaller still as the scope and quality of the home-grown correspondence programme increase.

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[3] B.J. James and C.A. Wedemeyer, "Completion of University Correspondence Course by Adults," in Journal of Higher Education, Vol. XXX, No. 2, February, 1959.

[4] J.W.C. Johnstone and R.K. Rivers, Volunteers for learning. (A study of the Educational Persuits of American Adults), National Opinion Research Center (NORC) Monographs in Social Research, Chicago. Aldine Publishing Co., 1965.

[5] Naomi E. McIntosh, What do we know about our students? Paper prepared for the 11th World Conference of the International Council for Correspondence Education, New Delhi, India, 8-15 November, 1978.

[6] H.W. Monstross, Adult Special Class Students. (A description of the Adults Attending University of Wisconsin Extension Division Special Classes). University of Wisconsin-Extension, 1959.

[7] H. Kempfer, Private Home Study Schools in Illinois, State of Illinois Advisory Council on Vocational Education, 1973.

[8] K.P. Cross, J.R. Valley and Associates, Planning Non-Traditional Programmes. (An Analysis of Issues of Post-Secondary Education). Jossey-Bass Publishers, San Francisco, 1974.

[9] Torstein Rokkedal, Correspondence Studies, (Recruitment, Achievement and Discontinuation) condensed NKI-Skolen Undervisnigssentrum, Oslo, Heglands Boktrykkeri, Flekkefjord, Norway, 1972.

[10] M.G. Moore, "Towards a Theory of Independent Learning and Teaching", in Journal of Higher Education, Vol. XLIV, No. 12, December, 1973, pp. 661-679

The paper is also about correspondence students who are engaged in credit courses, that is the General Certificate of Education Ordinary level courses. It is not about students engaged in non-credit courses which do not as yet exist in the country.[13] The nature of the courses may have played a part in attracting the kinds of persons we now have in the correspondence programme, but more of that later.

3. Biographical Characteristics of the students

The question as to who the correspondence students are can be more directly answered by reference to their biographical details. We will therefore begin by looking at the sex, age and family situation of the students.

(a) Sex Distribution of the Students

The sex distribution of the students is shown by the following table:

Table 1

SEX DISTRIBUTION OF STUDENTS

Sex	Number	Percentage
Male	285	92.3
Female	24	7.7
Total	309	100.0

Only about 8% of the subjects were female, the remaining 92% being male. This shows that the females are grossly under-represented in the population of correspondence students in the country.

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[11] The main overseas correspondence schools operating in Ghana are the Rapid Results College, Wolseley Hall, Metropolitan Correspondence School, all in Britain, and the International Correspondence School in the United States of America.

[12] J.K. Ansere, op. cit., p. 2

[13] Plans are a foot to mount correspondence education programmes for non-formal courses, which will be non examinable. A nation-wide research which was conducted to find out about people's needs will soon be published.

The finding may sound surprising to people in Europe and North America where, according to studies made, the ratio between the sexes in practically all educational programmes is equal. In the study conducted by James and Wedemeyer[14] about correspondence students engaged in High School Courses in Wisconsin, United States of America, it was discovered that the ratio between the male and the female students was evenly balanced. The same trend was found by Glatter and Wedell in their research about the characteristics of correspondence students in Britain.[15] The authors found that persons enrolled in the General Certificate of Education correspondence courses, much like the courses in which the Ghanaian students were engaged, were divided almost equally between the sexes.

In relation to the Ghanaian situation, however, the finding is to be expected. It compares very favourably with the sex distribution of the country's formal and nonformal educational system. The proportions of females to males in the various formal educational levels in Ghana are as follows:

Table 2

SEX DISTRIBUTION IN GHANA'S FORMAL SCHOOL SYSTEM, 1970

Level	PERCENTAGE	
	Male	Female
Primary	56	44
Middle	59	41
Secondary	72	28
University	87	13

Source: Ghana's Educational Statistics[16]

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[14] B.J. James and C.A. Wedemeyer, op. cit., p. 89

[15] R. Glatter an and E.G, Wedell, With the co-operation of W.J.A. Harris and S. Subramanian, Study by Correspondence, Longman Group Ltd., London, 1971, p. 88.

[16] Ministry of Education, Ghana Educational Statistics, 1970-71 Government Printer, Accra, Ghana, 1973, pp. 18, 46, 67, 88. Corraborated by Ghana Education Service, Digest of Education Statistics (Pre-University), 1974-75, Government Printer, Accra, Ghana, 1976, Table 1.

At the lower levels of the formal educational ladder, that is, at the point where children enter primary school for the first time, there are virtually as many girls as there are boys. But as they advance further up the ladder, the males outnumber the females, as could be observed from the above table.

A study undertaken by Neilson, Opere-Abetia and Banibensu[17] about adult learners engaged in the G.C.E. evening class programme of Ghana's Institute of Adult Education revealed that 10 percent were females while 90 percent were males. A lower proportions for the females was found in other African countries. For example, in a study[18] conducted by Ericsson and Mauma in Tanzania, it was known that only 6 per cent of the students registered in the Institute of Adult Education Correspondence programme were females.

The reasond for the low representation of females in the correspondence programme as in other educational programmes in Ghana can be traced to the history, culture and the economic situation of the country. At the time the persons who have now reached secondary and University levels were born, parents did not think that the formal school system was necessary for their children, especially their female children. A variety of reasons have been given for the aversion Ghanaian parents of old felt towards the formal school system, but the most important was the adverse effect it was believed to have on the culture of the people. Parents feared that western type of education might make their children despise the religion and culture of the people.[19] As Hurd stated,

> "...... education provided a channel for rebellion against traditionalism for those who were able to take advantage of it.[20]

Parents had to be coerced by the colonial administration to send their children to school. And there were instances in which only naughty children were sent to school as a form of punishment.

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17. J.B. Neilson, J. Opare-Abetia, and R.A. Banibensu, Adult Education in Ghana, Survey 1968-69, Institute of Adult Education, University of Ghana, Legon, Ghana, 1970, p. 5.
18. E. Ericsson and R. Mauma, Elimu Yasiasa Utangulizi (A study on Radio Programme). Institute of Adult Education, University of Dar es Salaam, Tanzania, August, 1973, p. 4 (Unpublished).
19. J.K. Ansere, (ed), Education for Devolopment (a case Study of Northern Ghana), Theme for the Northern Easter School, 1977, Institute of Adult Education, University of Ghana, pp. 13-19.
20. W. Birmingham, et. al., (eds), A study of Contemporary Ghana, Vol. Two: Some Aspects of social structure, George Alton and Unwin Ltd., London, 1967, pp. 229 and 230.

When Ghanaian parents later came to accept modern education, they allowed their sons more than their daughters to go to school, because, not unlike many other people in the world, they thought the place for the woman was the home. The primary function of a woman, in their view, was to bear and rear children and to carry out household chores. That girls should marry as soon as possible was crucial to the Ashantis. Being a matrilineal society, they depended on the female members of the family to maintain the family geneology by bringing forth children.

Economic considerations also had something to do with the disproportionate under-representation of females in the school population. Since parents had to pay for their children's schooling,[21] except when fee-free education was introduced in Ghana in 1961, there was a limit to the number of children parents could send to school. Given the prejudice parents had to girls going to school, the girls became the first victims. And when a parent was able to send all his children to school, and he later became financially unable to maintain them in school it was the girls who were the first to be withdrawn from school.

(b) Age Distribution of the Students

The following table illustrates the way in which the students were distributed according to age. In order to know the variations that exists among the students, the data on age have been cross-tabulated with the data on sex.

Table 3

DISTRIBUTION OF STUDENTS ACCORDING TO AGE X SEX

Age Group	Number			Percentage	Cummulative
	Male %	Female %	Total		
14-18	6(2.11)	1(4.17)	7	(2.27)	2.27
19-23	50(17.54)	5(20.82)	55	(17.80)	20.07
24-28	86(30.18)	15(62.50)	101	(32.69)	52.76
29-33	67(23.51)	2(8.34)	69	(22.33)	75.09
34-38	39(13.68)	1(4.17)	40	(12.94)	88.03
39-43	21(7.37)	0(0.00)	21	(6.79)	94.82
44-48	6(2.11)	0(0.00)	6	(1.94)	96.76
49-53	3(1.05)	0(0.00)	3	(0.97)	97.73
54-58	2(0.70)	0(0.00)	2	(0.65)	98.38
59-63	2(0.70)	0(0.00)	2	(0.65)	99.03
64-68	3(1.05)	0(0.00)	3	(0.97)	100.00
Total	285(100.00)	24(100.00)	309	(100.00)	-

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[21] J.K. Ansere, op. cit., p. 13-15.

The bulk of students, that is 95 per cent fell between the late teens and early forties age groups with only 5 per cent falling beyond age 43. Among the students who were aged between 14 and 43, the biggest concentration was on the age bracket 24-28. These numbered 101 students and represented nearly one-third of the sample. The mean age for all the group was 29.7 years.

The finding that arises from these data is that the Ghanaian correspondence students are predominantly young. But the female students were younger than their male counterparts, the respective mean ages being 25 and 30 years. There was no female student who was older than 38 years whereas there were quite a number of male students who passed that age.

The age structure of the Ghanaian correspondence students as the evidence showed corresponded with the age structure of correspondence students elsewhere in the world. Although Glatter and his co-authors[22] did not calculate the mean age of the correspondence students they studied, their general finding seemed to tally with the finding of this study, namely that correspondence students were generally young persons.

The study conducted about correspondence students in Norway lent further credence to this fact. In that study Torstein Rekkedal[23] found that the students were concentrated in the age group 20-24, with two thirds of the students being in their twenties as was virtually the case with the correspondence students in Ghana.

There was a parallel situation in the United States of America. In their research about correspondence students in that country in 1959, James and Wedemeyer[24] discovered that the majority of the students were no younger than 15 years of age and no older than 35 years of age. A more recent study by Raymond M. Duest,[25] on the staff of the University Wisconsin Independent Study Department, came to the same conclusion in 1972 that most of the students were in the age range 19-35.

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22. R. Glatter, S.E.G. Wedell, Study by Correspondence, op. cit., p. 88

23. Torstein Rekkedal, Correspondence Studies (Condensed and Abridged), op. cit., p. 18.

24. B.J. James and C.A. Wedemeyer, Completion of University Correspondence Courses by Adults, op. cit.

25. Raymond M. Duest., Independent Study Survey Report, 1972, mimeograph, p. 8 (unpublished).

(c) Marital Status of Students

The respondents were asked to indicate whether they were married or not; and if they were not married, whether they were single (that is, not having ever married), widowed, divorced or separated. The following table summarizes the results. And in order to know the differences that might exist betwen the male and female students, this characteristic has been cross-tabulated with sex.

Table 4

MARITAL STATUS OF STUDENTS X SEX

Sex	Married	Single	Widowed	Divorced or Separated	Total
Male	182 (58.9%)	94 (30.4%)	3 (1.0%)	6 (1.9%)	285 (92.2%)
Female	15 (4.9%)	8 (2.6%)	0 (0.0%)	1 (0.3%)	24 (7.8%)
Total	197 (63.8%)	192 (33.0%)	3 (1.0%)	7 (2.2%)	309 (100.0%)

The table shows that most of the students were married. Close to 64 percent of the lot were married, leaving 36 percent of them in the non-married category. That is to say, out of every three students, two of them were married.

This finding is to be expected considering that most of the students (80%) were over 19 years of age and therefore were old enough to marry. In fact, precisely because most of the students were of marriageable age, a lot more of them were expected to be married than was actually the case, especially as Ghanaians in general marry at an early age,[31] and especially as 97 percent of them were employed and earning incomes.

Another interesting fact is that about the same proportion of the male students as of the female students were married. The respective proportions were 63.9 percent and 62.5 percent. One would have expected a much larger proportion of the female students to be married than were actually married because in Ghana women generally marry earlier than men.

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[31] W. Birmingham, et al., op. cit., p. 202.

Other studies in Africa, few though they may be, portrayed the same picture about the age of correspondence students. In a small study on the students engaged in the correspondence education programme organised by the Institute of Adult Education of the University of Dar es Salaam in August, 1973, it was shown that as many as 90 percent of the students were aged between 19 and 40 with the highest concentration in the age group 20-29.[26]

Thus, whether in developed societies or undeveloped societies, correspondence students tended to be young adults.

All this fits the sociological picture of what is known generally about adult students at different stages of their lives. Adults are generally eager about educational activities from their late teens until their late thirties or at most, until their early forties. Afterwards, they relax in their keenness. Cyril Houle once said about adult students generally.

> "The very young adult seldom takes part,
> but there is a sharp upturn in the late twenties,
> a fairly constant level of activity until the age of 50,
> and a decline afterwards."[27]

Prosser made the same observation about African adult students,

> "They (are) spread throughout all age-groups,
> with a heavier density amongst the younger ages."[28]

Perhaps a more specific reason for the preponderance of the youth in the correspondence education programme of the Institute of Adult Education can be found from the structure of the Ghanaian population. As it obtains in many other developing countries, there is an imbalance in the population structure of Ghana with a heavy concentration of persons under twenty years of age. The 1970 Population Census of Ghana shows that 63.9 percent of the country's population were aged between 0-24 years.[29] Townsend Cole made this same point in his book.[30] And since there is a higher literacy rate among the young people than among the old people, adult education programmes, correspondence education not exempted, will be dominated by the young adults rather than the mature adults. This will be more so if the programmes involved are the ones which are designed for the youth. The General Certificate of Education courses fall into this category.

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26. E. Ericsson and R. Mauma, Elimu ya Siasa Utangulizi (A Study on Radio Programme), op. cit., p. 5.

27. Cyril O. Houle, The Inquiring Mind, Madison, Wisconsin: University of Wisconsin Press, 1961. p. 7.

28. R.C. Prosser, "The African Adult Student," in Lars-Olof Edstrom, et al, (eds.) Mass Education, Studies in Adult Education and Teaching by Correspondence in Some Developing Countries, op. cit., p. 250.

29. Ghana Government, 1970 Population Census of Ghana, Vol. II, Statistics of Localities and Enumeration Areas, Census Office, Accra, June, 1972, P. XLII.

30. E. Townsend Cole, Adult Education in Developing Countries, Pergamon Press, Oxford, 1969, p. 8.

The finding significantly differs from what we know from the Population Census about the nation's adult population. The 1970 census showed that 59.4 percent of the adult males were married as against 75.1 percent of the adult females.[32] Thus, 3 out of every 4 adult females were married earlier than their male counterparts. It is known from the records that as many as 70 percent of the women were married before they were 24 years of age, whereas only 16 percent of the men at the same age had been married.[33]

The discrepancy between the number of married men and married women can be explained by the cultural fact that in Ghana a man can and does have more than one wife.

(d) Number of Children of Students

Students were asked whether or not they had children, and if they had, how many children each of them had. The significance of this question is that it helps us to know something about the conditions under which the students live and study. Being people who study at home the number of children living with them in the house will have great impact on their studies.

The following table furnishes the data on the number of children students had:

Table 5

NUMBER OF CHILDREN OF STUDENTS

Category	Number	Percentage
No children	112	36.3
1 child	47	15.2
2 children	47	15.2
3 children	35	11.3
4 children	26	8.4
5 children	10	3.2
6 children	14	4.5
7 children	6	1.9
8 children	8	2.6
9 children	2	0.7
10 children	2	0.7
Total	309	100.0

It will be observed from the above table that 36.3 percent, that is, about one-third of the students, had no children. Put alternatively, one in every three students had no children.

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32. Ghana Census Office, *Ghana Population Census, 1960, Post-Enumeration Survey*, Government Printer, Accra, 1971, O. 207.

33. W. Birmingham, et.as., op. cit., p. 201.

and among the students who had children, the large majority had few rather than many children. Out of a total of 197 students who had children, as many as 155 (78.7%) had none to four children, and only 42 (21.3%) had four or more children.

The mean number of children per family was 2. This was vastly different from the mean number of children of the national adult population, which according to the statistics[34] stood at 4.9.

One plausible reason why the man number of children of the respondents was smaller than the mean for the adult population might be that the majority (94.8%) of the respondents were young adults between the ages of 14 and 43 as shown in Table 3 supra. There is a strong possibility that they will have more children as they advance in age.

In order to verify the popular view that the more educated a person is, the fewer children he tends to have,[35] the variable "number of children" was cross-tabulated with the other variable "educational level", as follows:

Table 6

NUMBER OF CHILDREN OF STUDENTS X EDUCATIONAL LEVELS

No. of Children	Low Education	High Education
No child	43	69
1 child	16	31
2 children	17	30
3 children	11	24
4 children	15	11
5 children	2	8
6 children	5	9
7 children	1	5
8 children	5	3
9 children	1	1
10 children	1	1
Total	117	193
Mean:	2.1	2.0

Four our purposes, students with "complete middle school" education or less are regarded as belonging to the low level education category, while students with more than that level are regarded as belonging to the high level education category.

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[34] Ghana Census Office, Ghana Population Census, 1960, op. cit., p. 303.

[35] The Capital Times, Wisconsin, Monday, April 19, 1976, p. 13 in article, "India Hikes Minimum Marriage Age."

In calculating the mean number of children for the students in each category, it was found that students with low level education had 2.1 mean children while students with high level education had 2.0 mean children. Thus, as far as correspondence students in Ghana are concerned, more educated persons have fewer children than less educated but the difference is not great.

4. SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS

We will now deal with the socio-economic characteristics of the students, namely, their educational backgrounds, their objectives for undertaking further studies; the reasons for choosing correspondence methods instead of other methods of instruction, their occupational status, their levels of income and where they are domiciled.

(a) Previous Full-Time Education of Students

The following table shows the educational backgrounds of the students.

Table 7

EDUCATIONAL LEVELS OF STUDENTS X SEX

Educational Level	Number			Percentage
	Male	Female	Both Sexes	
No formal education	1	0	1	0.32
Primary School	2	0	2	0.65
Incomplete Midd. School	2	1	3	0.97
Complete Midd. School	104	7	111	35.92
Incomplete Sec. School	46	3	49	15.86
Complete Sec. School	26	1	27	8.74
Teacher Training	77	9	86	27.83
Vocational/Technical	27	3	30	9.71
Total	285	24	309	100.00

All but one student had completed at least primary school. This is understandable since, without basic skills in literacy and numeracy, which primary schools are meant to teach, no one can hope to do the General Certificate of Education course whether by correspondence study or oral instruction. The one student in the group who had received no formal schooling reported that he learned how to read and write while incarcerated in prison.

The students were concentrated in the "complete middle school," "teacher training," "vocational/technical training" and "complete secondary school" categories. This means that when one meets a correspondence student in Ghana, the chances are that the student will be one with complete middle school education or more. But the student is more likely to be one who has had only complete middle schooling, since the highest proportion (85.92%) of the students were in that category.

The second single largest group (27.83%) consisted of students who had had teacher training background. It is not surprising that there should be so many of the students in that category taking correspondence study, because, in the scheme of things in Ghana, promotion in the teaching service is made contingent upon the acquisition of further academic rather than professional training. This policy has had a debilitating effect on the teaching profession, in that, the teachers who acquire higher academic qualifications through the General Certificate of Education course, leave the schools for the University or take jobs in other sectors of the economy where their superior academic qualifications give them better conditions of service.

It is reasonable to see persons with incomplete secondary education enrolled in a programme which is itself a secondary school programme, because such students would want to utilize the correspondence programme to complete the course. But one may be surprised to see persons who have acquired complete secondary education to be engaged in a correspondence programme meant for secondary school education. The explanation is that such persons take the correspondence programme in order to improve upon the grades they have already obtained. Such persons might need to have higher academic grades for entry into higher educational institutions such as the universities. Later on in this paper, it will be known that when the students were asked why they enrolled in the correspondence programme, many of them stated that they did so for the purpose of improving upon grades they had already earned in residential secondary schools.

The data also show that students with vocational or technical training enrolled in the programme. Again, one may wonder why such persons should want to take the General Certificate of Education which is essentially an academic training in liberal arts. The reason for their presence in the programme might be that they needed training in liberal arts to broaden their background.

It can be discerned from the data presented on the educational backgrounds of the students that the correspondence students are by no means a homogeneous group. One can see two distinct classes of students, one with a relatively low educational background, and the other with a relatively high educational background. The problems such a heteregeneous mix of students will pose for the writing, teaching and administration of the correspondence courses will be immense. The writer, the tutor and the administrator of the course will have to relate differently to the different kinds of student.

Regarding the different sex groups, it is noticed that the female students entered the correspondence programme with a slightly higher education background than their male counterparts. The lowest educational attainment with which any female student came to the course was "incomplete middle school" education. In contrast, the lowest educational qualification with which the male students entered the programme was "no formal education."

Besides, the greatest concentration of the female students was in the "teacher training" category, whereas the greatest concentration of the male students was in the "complete middle school" category.

To understand the divergences in the educational standards more clearly, it might be better to use the central tendency principle. To do this, the levels of education are calculated in terms of numbers of years spent in formal school. Thus calculated the mean number of years spent by the female students in formal school is 12.9 years as against 12.5 years for the male students and 12.6 years for the whole sample population. This confirms the fact earlier on mentioned that the females approached correspondence education with a higher formal education than the male students.

Apart from furnishing information about their own educational levels, students gave particulars about the educational background of their parents be they alive or dead. These particulars are summarized in the following table.

Table 8

EDUCATIONAL LEVELS OF STUDENTS' PARENTS

Educational Level	Father		Mother	
	Number	Percentage	Number	Percentage
No. formal education	179	57.93	254	82.20
Primary School	11	3.56	13	4.21
Incomplete Middle School	24	7.77	14	4.53
Complete Middle School	57	18.45	17	5.50
Incomplete Secondary School	12	3.88	5	1.62
Complete Secondary School	8	2.59	2	0.65
Teacher Training	9	2.91	0	0.00
Vocational/Technical Training	4	1.29	4	1.29
University or equivalent education	5	1.62	0	0.00
Total	309	100.00	309	100.00

In comparing the above data with those for the students, it can be seen that the students as a whole had higher educational level than their parents, but this was more so in the case of their mothers than their fathers. In the case of the students, virtually all of them had some form of formal schooling whereas about half (57.93%) of their fathers and about four-fifths (82.20%) of their mothers had no formal education whatsoever. It is true some parents had university education or its equivalent; but these were only 5 in number, and they were fathers rather than mothers.

It is clear from the data that the fathers were better educated than the mothers, which is a reflection of the general situation in the country where there is a higher literacy rate among men than women.

And the fact that the students were better educated than their parents should not surprise the reader, for in Ghana, as the statistics indicate, the literacy rate for the younger generation is higher than what it is for the older generation.

(b) Objectives for Undertaking Further Studies

Unlike most other items in the questionnaire in which students were asked to select from a given number of answers, this question was deliberately made open-ended to allow the respondents as much freedom as possible to express their own perceived objectives. As was expected, each respondent mentioned several objectives, but to simplify tabulation, these objectives were put into four broad categories namely, occupational, personal, societal and educational objectives. And to know the relative importance that the students attached to the objectives, they were asked to show whether a particular objective was of primary importance or secondary importance.

Table 9 summarizes the responses give.

Table 9

OBJECTIVES FOR UNDERTAKING FURTHER STUDIES

Objective 1	Rating Primary Number 2	 % of Respondents 3	 Secondary Number 4	 % of Respondents 5	Total Respondents 6	% of Total Sample N = 309 7
OCCUPATIONAL:						
Career preparation	159	81.54	36	18.46	195	63.11
Carrer advancement	132	89.19	16	10.81	148	47.90
Career change	144	92.90	11	7.10	155	50.16
PERSONAL:						
Self-realization	37	77.08	11	22.92	48	15.53
Social acceptance	26	72.22	10	27.78	36	11.65
SOCIETAL:						
Service to others	8	53.33	7	46.67	15	4.85
Leadership	21	84.00	4	16.00	25	8.09

Objective	Rating				Total Respondents	% of Total Sample N = 309
	Primary		Secondary			
	Number	% of Respondents	Number	% of Respondents		
1	2	3	4	5	6	7
EDUCATIONAL:						
Knowledge advancement	168	98.82	2	1.18	170	55.02
Improvement in grades for admission into higher institution	72	98.63	1	1.37	73	23.63

Number exceed total sample, and percentages exceed 100, because individual students gave more than one objective.

It may be necessary to explain the columns in the table first. Column 1 is for the different kinds of objective put under the major heads. The sub-objectives have been compressed in terminology to save space.

Columns 2 and 4 indicate the frequencies with which an objective was mentioned. They can also mean the number of students in the sample who mentioned particular objectives. Columns 2 and 4 have been separated to take care of the kinds of rating students gave for each objective, that is, whether a particular objective was of primary importance or secondary importance.

Column 6 is the summation of columns 2 and 4. It gives us the total number of students who chose particular objectives, regardless of whether the objectives were of primary or secondary importance.

Column 7 helps us to know the proportion of the total sample (309) who, as it were, voted for particular objectives. The proportions indicated in this column are to be distinguished from those in columns 3 and 5. The proportions in column 7 are based on the total sample number (309) as has been stated earlier, while the proportions in columns 3 and 5 are based on the number of students who actually chose particular objectives; that is, they are based on the figures in column 6.

It will be noticed that far more students considered each one of the objectives as of primary importance than those who considered them as of secondary importance, except that on the objective: "Service to others," there were nearly as many students for one side as for the other.

Judging by the number of students who chose particular objectives or by the frequencies with which particular objectives were chosen, occupational objectives weighed heaviest on the students' decision to take further studies. And within the occupational category, career preparation was the most important, followed by career change and career advancement, in that order.

Apart from using the General Certificate of Education Correspondence Course for securing employment, advancing in employment already secured, and changing from present employment to a different one, people used it for gaining admission into higher educational institutions as has been mentioned earlier on. The relative importance the students attached to these purposes is illustrated by the data in Table 9. Within the educational category, those who stated that they enrolled in the course in order to gain more knowledge, were larger in number than those who did it for the purpose of improving upon their grades and entering higher educational institutions.

The next cluster of objectives students had for undertaking further studies was the personal one. The students desired more education in order that they might realise their potentialities much more fully than would otherwise be the case. They also desired more education in order to be better accepted in society. In other words, they continued learning in order to gain respect from their peers and other members of the society.

The least important set of objectives, according to the students' preferences, was the societal one. Within that category, those who wanted further education in order to be able to lead people were larger in number than those who wanted it in order to be of service to other people. The two objectives are different, because one can be of service to people without necessarily assuming a leadership position over them.

(c) Reasons for Choosing Correspondence Method Instead of Other Methods

In a country where formal educational facilities are very limited, nonformal education happens to be the only alternative means whereby adults can improve upon their education. There is no doubt that people in Ghana do take advantage of the nonformal education facilities existing in the country. In terms of the mode of learning and teaching, and as far as the General Certificate of Education is concerned, there are two nonformal programmes, namely, the face-to-face class programme and the correspondence course programme. Students choose which of these programmes they like, depending upon their social and economic circumstances. In order to know exactly what these circumstances were, the researcher asked respondents to state the reasons why they chose correspondence instruction instead of the other methods of instruction. As in the previous question, students were asked to indicate the kind of importance they attached to each one of the reasons given.

Table 10

REASONS FOR CHOOSING CORRESPONDENCE METHOD INSTEAD OF OTHER METHODS

Reasons	Rating				Total Respondents	% of Total Sample N = 309
	Primary		Secondary			
	Number	% of Respondents	Number	% of Respondents		
1.)	45	65.22	24	34.78	69	22.33
2.)	56	62.92	33	37.08	89	28.80
3.)	177	83.89	34	16.11	211	68.29
4.)	116	69.88	50	30.12	166	53.72
5.) See	26	36.62	45	63.38	71	22.98
6.) below*	16	34.78	30	65.22	46	14.89
7.)	42	42.00	58	58.00	100	32.36
8.)	3	37.50	5	62.50	8	2.59
9.)	36	75.00	12	25.00	48	15.53

Numbers exceed total sample, and percentages exceed 100, because individual students gave more than one objective.

*

Reasons:

1. Because I prefer to study on my own.
2. Because correspondence study does not interfer with family obligations.
3. Because correspondence study enables me to earn while studying.
4. Because correspondence study enables me to study in my own time and at my own pace.
5. Because correspondence study is cheaper.
6. Because I want to prove that it can be done.
7. Because correspondence study develops my initiative.
8. Because physical disability prevents me from going to classes.
9. Others.

It is clear that the predominant reason why students chose correspondence study was,

"because correspondence study enables me to earn while studying."

and about 8 in every 10 students who chose this reason regarded it as of primary importance. If, as we saw in our previous discussion, the chief objective students had in undertaking further study was to prepare themselves for a vocation, then it stands to reason that the same students would want to choose correspondence method because it helped them to hold their jobs while studying.

The reason which ranked second was:

"Because correspondence study enables me
to study in my own time and at my own pace."

Among those who chose that reason, about two-thirds regarded it as of primary importance.

The third most important reason was:

"Because correspondence study develops my initiative."

There were nearly as many students ranking that reason primary as those who ranked it secondary. It is interesting to note that correspondence students in Ghana recognize the importance of studying independently to develop learner initiative and, by implication, maturity.

Following closely this reason were, in order of importance, these other reasons:

"Because correspondence study does not interfer with family obligations,"

"Because correspondence study is cheaper," and

"Because I prefer to study on my own."

The least important reasons were:

"Because I want to prove that it can be done," and

"Because physical disability prevents me from going to classes."

The relative unimportance of the last but one reason can be verified from the fact that a greater number of students who chose it ranked it as of secondary importance. It could not have commanded any more significance than it did since it was only to prove a truism. That correspondence education works has already been proved beyond doubt.[36]

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[36] R. Dubin & T.C. Taveggia, The Teaching-Learning Paradox, Eugene: University of Oregon Centre for the Advanced Study of Educational Administration, 1968; also G. Childs, "Report of the Chairman of the Committee on Research," in Renee Erdos (Ed.), Proceedings of the Eighth International Conference, Paris: International Council of Correspondence Education, 1969, pp. 40-58.

The last of the least important reasons might have been given by students who were physically incapacitated in one way or the other. In spite of the small number of students who chose it, this reason was important to learners who were physically unable to attend regular schools.

(d) Occupational Status of Students

The data on the occupational distribution of students indicated that the majority of them were gainfully employed. Out of a total of 309 students, 288 (93.20%) were employed full-time, 11 (3.56%) were employed part-time, and only 10 (3.24%) declared themselves unemployed. And a slightly greater proportion of the male students were gainfully employed. The respective proportions were 97 per cent and 92 per cent.

This finding satisfies one of the general purposes of correspondence education, namely, to offer opportunities for persons tied to family and vocational responsibilities to obtain further education without having to withdraw from employment and home. As was revealed by the data, almost all the respondents were employed while studying by correspondence courses.

After having found how many of the students were in and out of employment, it was necessary to inquire further into what types of occupation those who were employed were in, and what things the unemployed were doing.

Ten of the students who indicated they were unemployed were still at school. These were students in the formal school system who felt it would be to their advantage to combine correspondence course with classroom learning. This is quite permissible not only in Ghana but elsewhere in the world. In a seminar project carried out by the researcher about correspondence students in Madison, Wisconsin,[37] it was discovered that a sizeable number of the students were also students in residential high schools; they had in fact been recommended and supported by their schools to undertake correspondence courses. The reasons why students in regular school programmes should find it necessary to take courses by correspondence were that there might be particular subjects the students wanted to study but which their schools could not make available, or some students who were high achievers found the pace of work in class so slow that they wanted to utilise correspondence courses to accelerate their pace of learning.

Seven of the unemployed students in Ghana were fully dependent on their parents or guardians, one was in prison, one was incapacitated, one was a retiree, and one was a full-time housewife or homemaker.

The employed students were distributed among the various occupations as follows:

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[37] Joe K. Ansere, Some Characteristics of Independent Study Students in Wisconsin and Ghana, Seminar Project, July, 1974, mimeograph (unpublished), p. 11.

Table 11

OCCUPATIONAL DISTRIBUTION OF STUDENTS X SEX

Occupational Category	Number		Total	Percentage
	Male	Female		
Professional	4	1	5	1.73
Sub-Professional, e.g. teachers	93	8	101	35.07
Managerial, Admin.	10	0	10	3.47
Agricultural	9	0	9	3.13
Supervisory	16	1	17	5.90
Skilled worker, artisan	14	2	16	5.56
Clerical/Service worker	96	6	102	35.42
Semi-skilled worker	7	0	7	2.43
Unskilled worker	13	1	14	4.86
Armed Forces	7	0	7	2.43
Total	269	19	288	100.00

The students as a whole were concentrated in the "Clerical/Service Worker" and the "Sub-professional" categories, both representing 70.49 per cent of the total. That is to say, out of every 10 students, 7 were clerical personnel or sub-professional personnel. It may be mentioned that the "sub-professional" category consisted mostly of teachers. There were only 2 students included in that category who were not teachers. Of these, two, one was a nurse and the other a surveyor.

The next occupational categories a student was likely to be in were supervisory, skilled, unskilled, managerial/administrative, agricultural, semi-skilled, armed forces, and professional occupations, in that order.

A greater proportion of the female students were teachers than the proportion of the male students who were in that occupational category. The respective percentages were 42 per cent and 35 per cent. This means that if one takes any number of female correspondence students in Ghana, the chances are that more of them would be teachers than not.

This is reckoning in relative terms; in absolute terms, however, there were more male teachers than female teachers. This finding coincides with the national trend where, among the total number of teachers, the male teachers outnumber the female teachers. According to the statistics,[38] 67 per cent of the primary school teachers are male while 33 per cent are female.

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[38] Ghana Education Service, Digest of Education Statistics (pre-university), 1974-75, op. cit., p. 32.

The respective percentages for middle school teachers are 77 per cent and 23 per cent.[39]

It is interesting to note that 7 of the employed students were members of the Armed Forces. This is a far cry from the situation in the United States where tens of thousands of correspondence students are members of the Armed Forced. In fact, it was to satisfy the felt needs of the Armed Forces personnel for further education that the United States Armed Forces Institute (USAFI)[40] was established in 1942. One wishes that the personnel of the Armed Forces in Ghana would take greater advantage of the correspondence courses.

The respondents in clerical occupations constituted 35 per cent of the sample population. Brian Neilson, et. al.[41] found the same trend among the general adult students enrolled in the programmes of the Institute of Adult Education in Ghana. This is not surprising because clerical staff represent the largest single occupational group in the country, that is after farmers.[42]

If the professional, sub-professional, managerial/administrative, supervisory and clerical occupations are regarded as white-collar occupations, and the remaining categories as blue-colar occupations, then the large majority of the employed students were white-collar workers while a small number of them were blue-collar workers. The proportions were 82 per cent for the former and 18 per cent for the latter.

Again, if members of the white-collar occupations are considered as belonging to the middle class or failing that, lower middle class, then the working class was woefully under-represented in the correspondent student population.

The fact that persons in the blue-collar occupations were under-represented in correspondence education is understandable, since the blue-collar workers in any case have the highest rate of illiteracy of all the occupational groups in the country. The statistics show that while only 13.4 per cent of the professional and clerical personnel are illiterate, as high as 66.2 per cent of the production and related workers are illiterate.[43]

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39. Ibid., p. 34.

40. Disbanded, May 31, 1974.

41. J. Brian Neilson, et. al., op. cit., p. 58.

42. W. Birmingham, et. al., op. cit., p. 237.

43. Ghana Manpower Board, Education and Manpower Development in Ghana, Paper in files of the Ghana Manpower Board, mimeograph (unpublished), p. 3.

(e) Incomes of Students

Success in any educational activity depends not only on the possession of a reasonable level of intelligence and learning skills, but also, in a more practical sense, on the ability to bear the financial encumbrances involved. For this reason, the researcher inquired into the financial position of the students. The following are the results.

Table 12

MONTHLY INCOME OF STUDENTS X SEX

Monthly Income ¢	Number			Percentage
	Male	Female	Both Sexes	
No income	16	5	21	6.80
1- 50	28	1	29	9.39
51- 75	63	4	67	21.68
76-100	95	7	102	33.01
101-150	58	6	64	20.71
151-200	17	1	18	5.83
201-250	4	0	4	1.29
251-300	0	0	0	0.00
301-350	1	0	1	0.32
351-400	0	0	0	0.00
401-450	3	0	3	0.97
Total	285	24	309	100.00

About 71 per cent of the students received incomes ranging from ¢0-100 per month, or ¢0-1200 per annum, which according to Kodwo Ewusi,[44] is the income bracket for the working class family in Ghana. He gave the incomes for the various social and economic classes as follows:

Lower class	¢ 0-1200 per annum
Lower middle class	1201-2400 " "
Upper middle class	2401-6000 " "
Upper class	6001 and over "

On the average, the students received a monthly income of ¢89.33 or ¢1072.00 per annum, which fell within the income range Kodwo Ewusi proposed for the lower class. The mean income, it will be seen, is very close to the upper limit of the scale, and therefore could bring the group very close to the income range stipulated for the lower middle class.

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[44] Kodwo Ewusi, The Distribution of Monetary Incomes in Ghana, Technical Publication Series No. 14, ISSER., Legon, 1971, p. 55.

It can be observed that the female students had lower income than the male students. The mean yearly income for the female students was ¢910.20 as against ¢1085.52 for the male students.

(f) Sources of Funding for Courses

Having known the financial position of the students, the next question examined was how the students financed their courses.

The Institute of Adult Education charges ¢20.00[45] for one complete course which may last anything from one to three years depending upon the motivation and learning ability of the student. Assuming that most students take three courses, the total cost would be ¢42.00.[46] And if we add about the same amount of money for books and stationery, the student has something like ¢84.00 to pay. The Institute expects all this money to be paid within a period of one-and-a-half years. This by no means is a light burden considering the financial position of the average student, and considering the economic hardships being experienced by most Ghanaians.

The following table sets out the information about the sources from which the students obtained funds to meet the cost of the course.

Table 13

SOURCES OF FUNDING FOR COURSES X SEX

Source	Number			Percentage
	Male	Female	Both Sexes	
Own Income	230	5	235	76.05
Spouse	2	16	18	5.83
Parents	10	1	11	3.56
Employer	38	1	39	12.62
Loan	1	1	2	0.65
Other	4	0	4	1.29
Total	285	24	309	100.00

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[45] Correspondence Education Brochure, Institute of Adult Education, University of Ghana. p. 5.

[46] The total should have been ¢60; it is less because the student is given a rebate if he takes more than one course.

An overwhelming majority of the students paid for the courses from their own resources, the proportion being 76.05 per cent. A smaller proportion (23.95%) paid for the courses from sources outside of themselves. Among the outside sources, employers were the greatest providers of financial assistance. Relatively very little came from parents, and resort to loans was very limited. It is interesting to note that there were 18 students (2 male and 16 female) who obtained funds from their marital partners to pay for the courses. One of the two male students might have been the respondent who, when asked about the purpose for which he was doing the course, replied that he was doing it to satisfy his wife. It is curious that the two male students obtained funds from their wives for the course, because, in Ghana most men consider it out of place to depend on their wives for financial support.

The biggest single source from which the female students secured funds was their spouses. This is to be expected because in Ghana women normally depend on their husbands for financial and other support. Parent did not provide much support for the female students.

When asked whether they found getting the money - from whatever source they got it - easy or difficult, 46.93 per cent of the students stated that they found it difficult, 11.32 per cent said they found it very difficult, 34.95 per cent said they found it easy, and 6.80 per cent said they found it very easy. Thus there were about as many students who found getting the money easy as those who found it difficult.

The researcher probed further into which sources were found easy and which ones difficult. To get to know this, the variable "source of funds" was cross-tabulated with the variables "easy" and "difficult". The results were that more students found getting funds from their own resources easy than those finding it difficult; more students found reliance on spouse easy than those who found that same source difficult; more students found getting funds from parents difficult than those finding it easy; and more students found recourse to employer, loans and other sources difficult than those who found these sources easy. When these scores were weighted, it was found that the easiest source of funding was reliance on one's own resources, and the most difficult source was loans.

It is understandable that students should find meeting the cost of the course by themselves easy relative to the other sources, because, most of the students were working and earning incomes. This is, however, not to say that the students did not find any difficulty in parting with their money. They must have, but that was not the question. The question was not whether using the money they had on the courses was easier or more difficult than not using it. The question was, after having decided that they needed money for the course, whether it was easier or more difficult utilizing their own money for the purpose than falling on some other means. And by their responses, the students felt that relying on their own resources was easier or less difficult than relying on other sources.

(g) Urban/Rural Distribution of Students

The division of localities into urban and rural is officially determined in Ghana on the basis of size of population. All localities with a population of less than 50,000 inhabitants are described as rural, while localities with 50,000 or more inhabitants are regarded as urban.[47]

The following table shows the urban/rural distribution of the students:

Table 14

URBAN/RURAL DISTRIBUTION OF STUDENTS X SEX

Area	Number		Both Sexes	Percentage
	Male	Female		
Urban	83	13	96	31
Rural	202	11	213	69
Total	285	24	309	100

More female students lived in the urban areas than they did in the rural areas. More of the male students, on the other hand, were found in the rural areas than in the urban areas. Taken together, more of the correspondence students lived in the rural areas than those in the urban areas. According to the figures, virtually two students in every three lived in the rural areas, while the remaining one lived in the urban area.

It is not surprising that a greater number of correspondence students lived in the rural areas than in the urban areas, because, for one thing, the population of Ghana is itself predominantly rural. According to the statistics, 77 per cent of the total population of the country live in the rural areas while the remaining 23 per cent live in the urban areas.[48]

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[47] Central Bureau of Statistics, Educational Statistics, 1963-64, Government Printer, Accra, Ghana, 1968, p. xiii.

[48] W. Birmingham, et. al., op. cit., p. 128.

Another reason that may have accounted for there being a larger proportion of the correspondence students in the rural areas than there was in the urban areas might have been that teachers who virtually formed the bulk of the correspondence students in the country were themselves located mostly in the rural areas. As can be seen in Table 11, teachers constituted the second largest occupational group among the correspondence students.

5. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

(a) Summary of Findings

From the foregoing discussions the profile of the correspondence student in Ghana will be as follows:

> "The Ghana correspondence student is a young male adult, married with two children. His educational background is slightly above middle school level. He is a working student, almost invariably in a white-collar occupation. His primary objective for undertaking further studies is to prepare himself for a career. He bears the expenses of the course out of his own pocket, and can be found mostly in the rural area."

(b) Conclusions

1. One obvious conclusion is that the correspondence student population in Ghana is heavily dominated by males, and that this situation is a reflection of what actually obtains in the formal educational system. This means that virtually only the male half of the society is being educated, and unless something is done to remedy the situation, the overall development of the nation will be endangered.

There are several ways in which the male-oriented educational system will affect the nation. At home, the man and his wife are unlikely to have common agreement on things if the man is educated while the wife is not. Being literate the man is likely to develop different interest from the interests of the wife, and in consequence, the two may move apart in life. The socialization of the children of such a family is bound to suffer as the children will find it well nigh difficult to decide which one of the parents they should follow. In the society, the womanfolk will be alienated from the main stream of national affairs, and feminine approach to things will be missing. Occupations, such as nursing, which are normally dominated by women will be short of trained staff. And the educational system itself will come to reflect only men's values, since the planning and organization of it will largely be in the hands of men.

The importance of educating women was recognized by Aggrey of Africa when he declared,[49]

> "If you educate a man, you educate an individual;
> but if you educate a woman, you educate a whole nation."

In other words, Aggrey was cautioning African nations against the dangers inherent in neglecting the education of women.

2. The study also revealed that persons of low socio-economic status generally participated less than persons of high socio-economic status. One conclusion that can be drawn from this is that the correspondence programme instead of helping to reduce the inequalities that already exist among the social classes aggravate them. The educated become more educated while the semi-educated become less educated. This does not augur well for orderly development of the nation.

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[49] Quote from E. Ampene, A Talk on the Centenary Celebration of the Birth of Dr. E. Kwegyir Aggrey, delivered at Accra, Ghana, November, 1975, p. 1.

It is true that all over the world better educated persons are more eager in taking advantage of available educational facilities than the less educated persons. But the reason for this may not always be that the less educated persons are disinterested in further education. The reason may rather be that relevant educational programmes are not organised for them. They may also be prevented from participating by financial cost.

3. The study also showed that not many unemployed persons participated in the correspondence programmes. This is unfortunate, for one would have expected that, with so much time on their hands, the unemployed persons, most of whom have received minimal education, would take advantage of the programme to improve upon their education, and consequently, upon their chances of securing employment in the future. By not working, and at the same time, not utilizing their spare time on worthwhile pursuits such as learning, the unemployed would be lending themdelves susceptible to anti-social behaviours traces of which have already manifested among the youth who live in the towns and cities of the country.

4. It was also found that the majority of the correspondence students lived in the rural rather than the urban areas. This is an important finding, because it shows the kind of orientation the organizers of the programme should have towards the administration of the programme. Becuase the officers of the Correspondence Unit are based in the urban areas, and because most of the other programmes of the Institute of Adult Education are urban-centered, there is a great temptation on the part of the presonnel of the Institute to view matters concerning correspondence students in urban terms. Now that it has been known that the correspondence students population is predominantly rural, the organisers of the programme would do well to change their approaches.

Living in the rural areas has mixed blessings for the student. Rural life imposes less distractions than urban life. Students who live in the rural areas will therefore have more time to devote to their studies. On the other hand, living in the rural areas may cause delays in the receipt of study materials and the lack of such study-aids as library services. In Ghana, the situation is aggravated by the centralized administration of the correspondence programme where study materials are marked and dispatched from the extreme southern end of the country, namely, Legon/Accra.

5. It can also be concluded from the types of objectives students give for entering the programme that most of them were not likely to remain continuous learners. Using Houle's typology,[50] it can be discerned that the majority of the students were goal-oriented and activity-oriented learners. The chief characteristic of goal-oriented and activity-oriented students is that they cease learning as soon as they achieve the purpose for which they entered the programme. On the other hand, the learning-oriented learner goes on learning because learning has an intrinsic value for him.

If this assessment is correct, and there is no evidence to show that it is otherwise, then the adult educators who provide the programme are failing in one of their most important duties, namely, to make people want to continue learning.

Another conclusion that may be drawn from the data on students' objectives is that there may be some enrollees who are on the course for purposes other than those publicly announced for the programme. Such students are likely to be the activity-oriented learners who, according to Houle, leave the course as soon as they attain their objective. This is conceivable in the Ghanaian situation where many students register for only the English Language course which they use to obtain promotion in the Civil Service.

(c) Recommendations

1. The fact that women do not participate in formal and nonformal education as much as they should is, to a large extent, determined by cultural norms. Therefore, any lasting change in the situation can only come about when the culture itself changes. Parents should realize that it is as important to educate a woman as it is to educate a man and that they should be as keen in sending their daughters to school as they are in sending their sons. Correspondence education provides a unique opportunity for married women to further their education. Through it, married women with children to care for and homes to manage can study without abandoning their familial responsibilities.

2. In the examination of the possible causes for the low participation of persons of low socio-economic status, it was discovered that the inability of the student to bear the cost might be a factor. The most effective way to solve this problem is for the government to make adult education a free service. This can be justified on two main grounds. One is that the formal educational system itself is fee-free right from the primary school level tb the university level.

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[50] C.O. Houle, The Inquiring Mind, The University of Wisconsin Press, Madison, U.S.A. 1963, pp. 15 & 16.

The remission of fees for adult education will, no doubt throw a heavy burden on the government, but if the government has been able to make formal education fee free, it should be able to do the same for nonformal education especially as adults are the ones that pay the taxes with which the entire educational system is maintained.

The second reason for making the recommendation is that adult education costs the government but very little, considering that adult learners continue to work while studying, and in the case of correspondence education, no physical facilities such as school buildings, chairs and tables are needed.

Employers could make a contribution towards the education of their workers by paying part or the whole of the cost of further education. The employers stand to gain rather than lose by helping to educate their workers, since better educated workers can perform more efficiently than less educated workers.

The types of media the Institute of Adult Education uses in publicizing its correspondence programmes do not appear to be suitable as far as persons of low socio-economic status are concerned. Instead of using newspapers to which many workers, particularly the blue-collar workers, do not subscribe, the Institute should utilize workers' organizations, churches, shopping centres and other places where workers frequent.

Because the majority of the students gave occupational reasons for embarking on the programme, the promotional literature should emphasize the role of education in improving upon one's chances of getting employment. This fact is not emphasized strongly enough in the present promotional literature.

3. The same remedies that were recommended for improving upon the participation of persons of low socio-economic status in education can be applied in the case of the unemployed. If adult education is provided as a free service by the government, and if the correspondence programme is advertised through the media to which the unemployed persons are used, it is highly probable that they will participate more.

4. The best way for the organizers of the correspondence education programme to serve the students, most of whom live in the rural areas, is to decentralize the organization of the system. The regional officers of the Institute of Adult Education can be charged with some of the responsibilities, such as the distribution of study materials within a particular region, and counselling and guiding students who reside within the region in which the officers operate. And instead

of centralizing all the marking of scripts at the headquarters of the Institute, tutors could be recruited within each region and charged with the marking of the scripts of the students who reside in the region.

These measures might help to reduce the delays that often occur in the dispatch of course materials to and from the headquarters. They might also improve the rapport between the students and their tutors, and between these two, on the one hand, and the administration, on the other.

5. In order to encourage the students to be continuous learners the Institute of Adult Education should provide opportunities for extra curricula activities among the otherwise isolated correspondence students. They should organize conferences and seminars in which not only academic matters but also non-academic matters are discussed. These activities will help broaden the interests of the students. The British Open University does this for its students every summer.

Lack of interest in continuous learning may stem from the experiences people have had in their previous schooling. If a person hated learning when he was at elementary or secondary school, it is unlikely that he will like learning in his adult-hood. Conversely, if he liked learning at school, the chances are that he will continue doing so when he is out of school. Part of the remedy for this problem should therefore be sought in the formal school system itself. Teachers and administrators of the formal school system should provide conditions under which school children would enjoy learning while at school so that they will want to learn when out of school. It might be necessary for the teachers and administrators to undergo retraining to make this possible.

To meet the needs of students who come to the programme with different and more limited objectives than the actual objectives of the programme the Institute should structure the courses in segments or modules, so that those who want parts rather than the whole course will get their needs satisfied.

6. EPILOGUE

An attempt has been made in this paper to describe the nature and conditions of the Ghanaian correspondence students, the implications of these conditions, and the steps that should be taken to resolve the problems that face the correspondence students. It is hoped that the organisers of the programme will use these facts in improving upon the organisation of the programme. It is also hoped that countries that intend to embark upon correspondence education programmes will benefit from the experiences that have been enunciated in the paper.

In a word, the study out of which this paper has emanated, is helping to rectify the situation Prosser pointed out about adult education programmes in Africa when he stated:

> "In Africa, a considerable number of adult education programme have been and are being mounted, but precious little is known which has been scientifically verified about the African adult student."[51]

The paper is also supporting McKeachie's view that,

> "...... increased knowledge on the part of instructors about the characteristics of their adult students makes instruction more effective."[52]

Legon, Ghana
15/8/79

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[51] R.C. Prosser, "The African Adult Learner," in Lars-Olof Edstrom, et. al. (eds), *Mass Education: Studies in Adult Education and Teaching by Correspondence in some Developing Countries*, Almqvist and Wiksel, Stockholm, The Dag Hammerskjold Foundation, 1970, p. 240.

[52] W.J. McKeachie, "Psychological Characteristics of Adults and Instructional Methods in Adult Education", in R.G. Kuhlen (ed.), *Psychological Background of Adult Education*, Center for the Study of Liberal Education for Adults, Chicago, Illinois, 1963, p. 132.

3.18.8. Experiences in Tanzania

An issue in the Conference has been one of recognition. The Co-operative College of Tanzania is a semi-government directed body which aims at the farming community. The composition of the council reflects government's commitment. The correspondence unit is one of the academic units of the College, which prepares students who come to residential courses for a Diploma in Management and Accountancy.

Co-operatives started in the country as early as 1925. Up to 1952, there was no educational provision for co-operative workers. The three East African countries then established a joint co-operative college, but this did not meet demand. Following Tanzanian independence (1961) the Government established its own college to meet the needs of 1.7oo co-operatives (5 workers in average) and 45 co-operative unions (4o workers in average). The model of an educational institution catering for persons outside the College, and to prepare prospective students for entry using correspondence courses was adopted. Since 1965, 33.5oo students have been catered for.

Another group of students study in groups of 1o - 15 persons, who discuss questions based on the texts and supporting radio programmes. Students send in assignments which are commented on by the teachers of the Co-operative College.

For development of distance education, the most important thing is to obtain recognition of distance education as being as good as formal and traditional forms of education. Planners must accept the need for development and the role of distance education to meet these needs. This has resource saving implications. New target populations must be sought out and persuaded as to the applicability of distance education to their needs. Unless there is a development of job-oriented distance education, there will be continuing frustrations as the traditional system fails to meet demands and needs.

In Tanzania there is a government directive requiring staff development schemes in all organizations. Here distance education can play a part. This is a mission of the Correspondence Unit within the Co-operative College of Tanzania and new courses arebeing currently developed. This is most important. Finally it is important that educational and development planners are involved in discussions about distance education.

After these presentations the discussions were directed on the main topic:

3.18.9. Developing Distance Education in Africa: Discussions

Some trends came out of these presentations. The problem of recognition was a major one. Courses should be of a suitable nature, with qualifications of equal status, where this appropriate, and meeting the needs of people. The second was to have a clear idea of the student profile. The third was the problem of staff shortages, including the need for staff training and the attraction of good staff. There was a need for educational planners to be involved, and to explore co-operation on a bilateral basis, including possible joint use of materials. In discussion the need for distance educators to publicize their efforts and the potential of their system to meet needs properly assessed through surveys and formative evaluation. Distance educators must initiate such discussions with government and other bodies. What we need to discuss now is how can distance education develop. To what extent should distance education reinforce and be an adjunct to formal education or go into informal fields? Does the fact that distance education covers the formal field, and hence has to struggle for recognition, hinder its acceptance? Recognition is at several levels: of government, of colleagues (in conventional system); or by distance educators committed or otherwise to what they are doing. There is a need for existing institutions to see distance education as valid and effective. But distance educators will prove themselves by their results. There is always resistance to change. Of course, they must also publicize their results. Nigerian experience suggests that recognition by colleagues is coming. This is most important.

Other participants felt that it is not the academic side which should be stressed. Distance education needs to see the socialization of its students.

One of the most important things is for national plans to include distance education and allocate it the finances that it needs. Also, once in the national plan, funds can be attracted from such institutions as the World Bank. A World Bank study on the costs of distance education is shortly to be published and is broadly in favour of distance education as a cost efficient and effective means of development.

The question as to whether distance education should be an adjunct of formal education, or something different (non-formal) is interesting. Because people are conditioned to believe one receives education in a formal setting, it is a challenge to persuade people that one can achieve education in other forms. The media help too, to educate persons - but any suggestion that media can do more than help as adjunct - and be indeed a real alternative - then there is a hesitation as to the worthwhileness of what is being done. The sharing of experience across national boundaries can be a powerful persuader. Also, there is need to supplement the mere teaching of a subject - something is felt to be lacking. Here the media and the non-formal approach may help. On the question of recognition, the work of Committee I is important. Some persons wondered if there was a problem of recognition. Governments, educationists and students appear to have recognized the feasibility and usefulness of distance education. Is it a self-induced complex which we must get rid of? Distance education is a response to needs, which formal education is not coping with, as well as reaching new target populations or changes in the population (such as its increased mobility). So far as socialization is concerned, the home and the local society is more important than the school, and students studying at a distance are in their own home. Looking at organizational sturctures, the ethos of distance education and its needs are very different to traditional institutions, and in the end distance education will need to have an autonomous existance.

There was disappointment as to the direction of discussions in the present Conference. In the 1971 and 1973 conferences, the parallel development of distance education within the formal structure came out strongly, but there was excitement at the potential of distance education for non-formal education. But the comments suggesting the future to lie in non-formal education had been ignored. If distance education has anything to offer, it is about offering education to the majority - and not to a limited minority. So long as formal education is the aim, it is the minority which is being considered - and distance education will be at the periphery, concerned with recognition and the qualification it offers. Distance education can change non-formal education into a systematic and mass educational activity, and if it does not do this, then it will have missed the boat. It must be concerned with development.

However, what is important, in reality, is the political commitment of governments to particular programmes. Many governments want to democratize formal education. More than one sees non-formal education satisfying a great need in Africa, insistence on extending primary education and a technically or scientifically oriented secondary education; distance education is trying to meet a given lack of school places. Of course, distance education's role in non-formal education is important, but there is a need to assess real needs.

What, though, is the objective of the Conference. Encouragement of formal education may not be appropriate in some countries. Distance education helps some countries overcome problems or improve on classical education. Are there no dangers in trying to replace conventional education?

In connection with the topic discussed above it seems relevant to include here a paper on the only one Private African Correspondence School in the Continent:

PROBLEMS OF FUNDING AND OPERATING A PRIVATE CORRESPONDANCE SCHOOL IN AFRICA WITH PARTICULAR REFERENCE TO AGGREY MEMORIAL SCHOOL,MALAWI

General problems

It seems to me that whoever contemplates of starting and operating a correspondence school in Africa will at one time or another come face to face with the following problems:

(a) Lack of published material to guide him

For most enterprises that a person can think of starting there is a book or two to read. There are books on Hotel Management; books on retail shop-keeping, books on how to operate a book shop. But there is no book or pamphlet throwing light on how correspondence schools are established. Certainly not in Malawi.

One can learn something about the financial and administrative problems that certain enterprises meet by reading published statements in the press. Most correspondence schools that are very active in Africa seem to be family institutions. They do not publish any reports on their activities.

One useful source of information would be ex-employees of a correspondence school. But most correspondence schools in this part of Africa are based in other countries, mostly in the United Kingdom, United States of America and South Africa. Their ex-employees are not therefore available for hiring or consultations.

He that thinks of starting a correspondence school cannot have a complete idea of what problems lie ahead of him. He has a lot to face.

(b) Finding competent lecture writers

In most African countries these days a graduate is no longer a rare creature. B.A's, B.Sc's and Doctors of Philosophy are now everywhere. But to find among them a competent lecture writer is not easy. Academic excellence does not always guarantee excellence in teaching by correspondence. Some highly qualified people cannot express themselves in simple written language. They are often tempted to write so as to appear erudite, and so they make a subject seem more difficult than it really is. You have to be careful about guiding them in preparing their work for they will tell you they already have experience about teaching elsewhere.

Some highly qualified people find writing a drudgery. Unless they are facing starvation, they will not keep up sending you scripts steadily. They will write three or four scripts and then stop communicating with you. If you have already advertised the course, then you find yourself unable to fulfil your obligations to those who have been quick to enrol.

The reputation of the school is then very much at stake. Those qualified people who are still looking for a job will usually take up the assignment with the determination to finish. But they are desperate for money. They want to be paid as soon as they deliver the lecture. They do not seem to appreciate that you need to have the script read through by another expert on the same subject. If you do not pay them at once, they grumble, and may desert you. To retain them, you may have to pay for some of the lectures they deliver, but when you hav the script read through later you may discover that you have paid for a mes of potage.

It is very difficult to find someone who will write the whole set of lectur wait until the lectures are edited and approved before demanding payment.

(c) Difficulty about raising capital

A local correspondence school plays a measurable part in conserving foreign exchange. Those students who would have remitted the money outside now have to deal with a local institution, in local currency. A correspondence school is a worthy participant in adult education. But to find money for its operation is not easy. The education authority nearby is not likely to grant it the sort of subsidies it grants to other private schools e.g. mission schools. Bank officials will listen with interest and sympathy to your plea for a loan to operate a farm or to purchase groceries for your retail shop. Requests for a loan to operate a correspondence school are summarily turned down.

A correspondence school can grow only through self-financing, i.e. by ploughing back profits into the business. It is hardly a money minting enterprise, certainly, not a bet for those in a hurry to become opulent.

(d) Fixing the correct level of tuition fees.

Offering tuition by correspondence is a highly competitive enterprise. Correspondence schools in developed English speaking countries are already well-represented in Africa. They have been active for decades; some have set up local offices.

For a local private correspondence school one way of penetrating the market is to charge lower fees than foreign correspondence schools charge. This is logical since their charges include some airmail costs. But how low can you charge? You are faced with inflationary prices of equipment and stationery from developed countries. Such necessary items in the running of a correspondence school as duplicating paper, stencils, ballpens etc. are imported, and their prices keep on rising. Sooner or later you find you cannot met the bills on time.

In Malawi competition with regard to fees comes mostly from South African correspondence schools. They charge very much lower than United Kingdom and American schools.

THE STORY OF AGGREY MEMORIAL SCHOOL

1. The school and what it is about

Aggrey Memorial School is a private correspondence school and has its office in Blantyre, Malawi. It serves students within Malawi, though interest beyond Malawi is developing. As at the time of writing this paper the school is entering the third year of its existence. Hence it is very much of a starter in the field of postal education. The school is named after the well known Dr. James Kwegyir Aggrey of

Ghana known as Aggrey of Africa. During his visit to the then Nyasaland in 1924 he addressed a number of students' meetings. The theme of his speeches was the same: to encourage the youth of Africa to believe in themselves; to realize that they were eagles by nature and not chickens.

Aggrey Memorial School has been established to continue Dr. Aggrey's message to the people of Africa in the field of Education. It is there to encourage them to improve their education with a view to playing bigger and greater roles in their communities. Its motto is "Only the best is good enough."

2. The idea behind the school

Every scheme, big or small starts as an idea in one person's mind. The idea of starting a correspondence school originated with a civil servant Mr. Desmond Dudwa Phiri. Over a number of years, many junior civil servants had approached him with their educational aspirations. They were preparing for United Kingdom besed public examinations, and in most cases they were not doing very well. Now they wanted to know how he himself had succeeded in his efforts to improve his education by postal tuition.

Mr. Phiri saw that many of those youths were failing to pass their exams because they just bought text books, read them and that was that. They received no help. When asked why they were not taking correspondence courses from overseas - United Kingdom and United States of America many of them said the fees were beyond their means. Some of them were of course enrolling for overseas correspondence schools.

Some of the courses these students were taking were somewhat irrelevant to African needs. A person studying personnel management might know a good deal about wage regulations, factory acts in United Kingdom but at the sametime know nothing about how similar problems are catered for in his country. A student of commerce might study the banking system in United Kingdom while he knew nothing about that in Malawi.

Mr. Phiri therefore felt that there was need for a local private correspondence school in Malawi which would try to:

(a) Give students relevant courses while maintaining contact with researches undertaken in overseas developed countries;

(b) Give tuition for fee charges that most people could afford.

3. Obtaining permission from the Ministry of Education

Once the idea had crystallize in his mind Mr. Phiri wrote to the Ministry of Education, Lilongwe for permission to start the correspondence school. Since independence many Malawians have become proprietors of enterprises of all types. Some own driving schools, some operate typing schools, others bus companies and countless of them own sizeable farms and shops thanks to the liberal economic policies adopted by the Government of His Excellency Ngwazi Dr. H. Kamuzu Banda. But no one individual had, apparently ever approached the Ministry of Education with a proposal to operate a private correspondence school, and Mr. Phiri's approach was at first taken less than seriously. He had to act persistently before his application was approved by the Minister.

4. Preparatory work before advertising the course

Before the Minister of Education had granted the permission to operate the school, he had demanded of Mr. Phiri a list of persons who would act as tutors and lecture-writers. Mr. Phiri had no difficulty in compiling this list. In various branches of learning friends and acquaintances alike enthusiastically agreed to have their names submitted to the Ministry. After the permission had been granted Mr. Phiri wrote to all those people and sent the agreement forms. Only five percent of them responded at once. The rest of th even if reminded by telephone would just say "Oh, yes, you will soon be having something from me". But nothing came.

THE WORK THAT WAS SUBMITTED

Some well-wishers had advised Mr. Phiri not to pay for the study materia untwl it had been declared to be suitable for release to students. But this procedure proved untenable in the majority of cases. Most lecture writers wanted to be paid at once, and if not paid at once, they simply stopped bringing in any more material. They assumed or feared that he did not really have money to pay them. In any case, some of them had offered to do the job because they were feeling an urgent need for an extra money.

To bring in experts to edit the scripts would have cost the school more. This cost had to be reckoned. Some of the subjects Mr. Phiri could easily edit himself since he own wide reading had prepared him for such editorial work. But since he had to do administrative work himself, write some of the lectures and edit other people's work, some of the scripts could not be edited fast enough. The owners came pressing for payment. To assure them of his good intention he had sometimes to pay as much as 25 per cent advance on the total amount due. But later on he found that the lectures did not quite meet his standards. The writers were not keen to revise the scripts for whic they had already been paid. Some just dropped out, and nothing was heard abo them again. Mr. Phiri had to do a lot of his own research and improve the scripts. Fortunately some of those which he had touched and improved have been well received by students and have helped to give the school a good nam But the task has been gargantuan.

THE PROBLEM OF RISING COSTS

Once a fee has been fixed it is not just praticable to change it now and than. Yet the prices of supplies which you use such as duplicating paper, ink, stencils keep rising between short intervals. The result is that you constantly see money coming in, and most of it going out with very little remaining in the business. The main item of expenditure is stationery which includes typing papers, duplicating papers, stencils and stamps. Apart from wages another big item is advertising. Out existence has to be known. If you do not continue the adverts those who were saying wait and see, think the enterprise has fopped. Some start the rumours in fact. The best enrolment you can expect is 25 per cent of the prospectuses issued.

PROBLEM OF RECOGNITION

There are two types of courses that most correspondence schools offer. There are those which lead to public examinations, and those which do not lead to public examinations.

Most students in Malawi as in many English speaking countries are studying for British Examinations. The prestige of a British Certificate is still very high in the former British colonies. Some examining bodies pose no special conditions. They will accept candidates that have been accepted by the local education authority.

Aggrey Memorial School has had two unhappy experiences with some examining bodies. Shortly after it had started operating it made contact with these bodies. They sent it past examinations papers, prospectuses and letters which suggested that they would treat candidates sponsored by this school no worse than others. But when the time for sitting came one examining rejected all our candidates and demanded to see the sort of lectures we had been providing our students; another insisted that we give details of our capitalization, administrative structure. Naturally students confidence in our institution suffered, and we were hurt in more ways than one.

Some correspondence schools have been issuing their own certificates for a long time, and some of these certificates have been worth very little in terms of standards. They are generally headed "Diploma" even if the stuff they have provided is very shallow. They have naturally created prejudices in the minds of some employers. At first we were apprehensive that our certificates would be dismissed out of hand. Fortunately, we are discovering that provided the certificates are issued only to those who master their subjects, the college certificate need not be despised by everyone.

Within the short period we have been operating, we have seen a number of our students get employed as journalists, salesmen, Book-keepers. Our former students have written to thank us for the help they had received. We are now keen to improve our courses and we would welcome to learn of the methods used by other colleges in awarding their own certificates.

PROPOSALS

We would request the experts on correspondence schools to look into the following matters:

(a) How a private correspondence school operating in Africa might cut down costs and pass on the benefit to students in the form of lower tuition fees.

(b) The setting up of public examining bodies by the United Nations for courses in journalism and other courses. Most of our students have been asking up to prepare them for public examinations in journalis but apparently there is no public examining body.

(c) How long should a school use the lectures.

(d) Publishing a journal devoted to correspondence education in Africa.
(e) Offering some capital and technical assistance to private correspondence schools provided their applications are sanctioned by the Ministry of Education.

(f) Supply us with a collection of material dealing with correspondence which we can deep in our library for reference.

3.19. The African Association for Correspondence Education

Special sessions were devoted to the African Association for Correspondence Education. The AACE had a first meeting on one of the evenings and the following officers were elected:

Chairman: Mr. Kenneth Noyau (Mauritius)
Vice-Chairman: Dr. K.J. Ansere (Ghana)
Secretary: Mr. T.H.B. Miyanda (Zambia)
Treasurer: Mr. A. Kilito (Morocco)

The AACE Executive had, in consultation, prepared a draft with proposals for action, for ECA-AACE relationship in relation to the work of the proposed co-ordinator for distance education, and a draft letter to institutions.

The Association's draft programme covers the year 198o-1982.

a) Training of course writers: 3 workshops per year, on a regional and language based division (with 4 regions identified).
Workshops could concentrate on: 1) course writing for teacher education and university level; 2) for secondary and vocational level; and 3) the production of materials for non-formal education. Regions would be consulted in content.

b) Publication of a Handbook for planners and administrators: They should identify source materials, identify contents, commission writers and editors.

c) Bilateral staff exchange programmes: To cater mainly but not exclusivelv for junior staff. Normally a maximum of 2 months secondment. Member countries would have to take their own contacts, draw up a proposal to go to the Executive Committee's annual meeting; and the AACE would try to find airfares and stipend.

d) Short-term consultancies: Provided either by channelling requests to funding agencies, or to try to obtain funds. Appointees would hopefully be persons with third world experience.

e) Newsletter: A simple thing.

AACE has been offered the co-operation of instructional agencies. AACE would approach other agencies. Dr. Heising had agreed to ask the German Foundation for International Development (DSE) to consider further co-operation. It was hoped therefore to have in 198o a Workshop in the Southern African region; in 1981 in the East African region; in 1982 (February) a General Assembly similar to the present Seminar.

In discussion the problem of funding executive-meetings at least yearly was raised. A committee-meeting was scheduled for May 198o. The co-ordinator might work with ECA in Addis Ababa, but the AACE had certain views on this appointment. The suggestion that member institutions should send details to the AACE and circulate to institutions whereupon they would arrange bilateral interchange. A group-production of a handbook was seen as a difficulty. Possible a single writer, calling for comments. This might work better. Also, it was suggested that regional "animateurs" should be appointed now. Also, it was suggested that the Commonwealth Secretariat might be approached. They might fund bilateral visits, which was something they funded (out within the Commonwealth). UNDP might also fund such exchanges. UNESCO too had regional African offices. The British Council would have to consider how the AACE's proposals fitted into existing aid to distance education institutions given on a bilateral basis. Mr. Twite would report back to London.

For the workshop in 198o it was suggested that the IEC would run it. One of the co-directors was present and had been approached on this. The University of Zambia, Centre for Continuing Education offered its facilities to host the workshop.

It was felt that the Newsletter should not be a one-way business. However, to start with the Newsletter would be modest. On the other hand, a bank of articles would be very useful. The Vice-President has access to a printing press and was interested in this.

The IEC was pleased to help. However, through the European Community fund, it might have money to spend in limited numbers on workshops. It was very difficult to keep a journal going. Epistola Didaktika might be willing to have an "African" slot in it. Use of existing journals might be a valuable asset, and increase North-South dialogue. The Open University Centre for International Co-operation and Services would also be happy to help. The Open University had a journal: Teaching at a distance, and both of these might be means of publications.

On the workshops it was questioned whether they would be regionally beased or open to persons from other areas, or across various levels. Coherence of interests was felt to be important. On the other hand, attendance from non-member-institutions might be useful, and also prove to be a "marketing" place. One suggestion was that each region should have at least one workshop. The classification of zones was normally done on United Nations lines, with francophone and arabic zones being based on natural linguistic differences. The zoning should, it was felt, be necessarily flexible.

Should the AACE change its name? It was felt that this should wait until the next General Meeting.

It had been hoped, that the AACE report of the out-going chairman and its constitution would have been available for circulation. This had not proved to be possible. The AACE has associate membership for non-African institutions and individuals.

The need for a full-time co-ordinator was raised. It was felt that the ECA should employ someone, but that the AACE would have interest in the terms of reference and appointment of the institution. Draft proposals have been drawn up to this.

In response it was felt that some of these proposals would make the position of the co-ordinator very difficult indeed, and that the proposals of the AACE might be inoperable, militate against any appointment being made, and unacceptable to any funding agency or the ECA. It was necessary for an appointee to be sympathetic to the work of the AACE. The involvement of the AACE in the specification of the job and in the appointment was felt to be valid, but this might run counter to United Nations and ECA appointment procedures. Donor agencies were often involved in the selection and appointment of experts, but there was no universal practice. There was need for AACE to approach the ECA on this issue. The AACE's position was of course a matter for the Association. The seminar itself might accept some recommendations which could be properly made on questions of involvement in the appointment, consultation and regular contacts with the AACE Executive and reports on progress to the AACE which could be incorporated into the seminar's recommendations. It was of course open for the AACE to find its own funds to secure a post. It was also possible there might be a post at ECA funded by the Dutch Government with effect from 1981. However, continuity of funding for any post would be a going difficulty. There were possibilities of an appointee working in the country of a member or an executive. However, AACE feels that without such a co-ordinator working with the AACE Executive and being guided by them, it would have difficulties in ensuring that its programmes were carried out or aided. It was clear that control over a consultant would be impossible to achieve. It was suggested that a revised draft was prepared to put to Plenary on Saturday 15 September. The roles of consultant and co-ordinator were very different. Possibly two posts can be considered.

It was agreed that the proposed aim was a directly-financed co-ordinator for the AACE, with an ECA post (with close cooperation with AACE assumed) as the fall-back position, and secondly that the co-ordinator was an experienced African distance educator. However, direct funding was very difficult, given the social and political problems of an international appointment. Operational problems could not be dealt with in Plenary. Delegates wished every success to the AACE in its work.

3.19.1. Chairman's report (presented on 1o th September 1979 at Addis Ababa)

I. Introduction

The African Association for Correspondence Education was established at a conference/workshop which was held in Nairobi, Kenya on 4-13 June 1973 and co-sponsored by ECA, UNESCO, SIDA, the Ford Foundation and the Friedrich-Ebert Stiftung. The idea of the formation of the Association, however, had been proposed at an earlier meeting in Abidjan, Ivory Coast in 1971. A Steering Committee had drafted the Constitution of the Association which was ratified at the Nairobi meeting.

II. Objectives

The main objectives of the AACE are:-

(a) To promote knowledge about correspondence education and its potential, and to encourage its use and improvement in all forms of education throughout Africa;

(b) To press for the acceptance and practice of the highest ideals and standards of correspondence education possible, and to lay down such standards and ideals in a Code of Ethics to be adhered to by all member institutions;

(c) To encourage co-operation and exchange of information and materials between the Association and its members and institutions, the Associations concerned with correspondence education inside and outside Africa;

(d) to encourage and conduct research and evaluation in the field of correspondence education;

(e) To conduct training in all aspects of correspondence education and material production;

(f) To maintain contacts between the Association and individual African Governments, and between the Association and inter-governmental agencies, and to advise governments on legislation for minimum requirements for the establishment of both public and private correspondence institutions.

In order to implement the above objectives effectively, a programme of activities was drawn up by the Executive Committee and approved by the delegates at the Nairobi meeting. It was recommended that funds should be sought with the help of the ECA for the setting up of the Secretariat with a full-time Executive Secretary to carry out the programme of activities agreed upon.

III. Executive Committee

The following were elected as members of the Executive Committee:-

Chairman - Mr. Peter E. Kinyanjui (Kenya)
Vice-Chairman - Mr. Isaac Kingbo (Ivory Coast)
Hon. Secretary - Mr. Kenneth Noyau (Mauritius)
Hon. Treasurer -- Mr. Richard Mwakatobe (Tanzania)

In addition, five regional representatives were elected to represent Eastern, Southern, Central, Western and Northern zones of the African continent. These were:-

Eastern Zone - Mr. Kenneth Noyau (Mauritius)
Southern Zone - Mr. James Nankwenya (Malawi)
Central Zone - Mr. Laurent Fondjo (Cameroon)
Western Zone - Mr. Clement Angoran (Ivory Coast)
Northern Zone - Vacant

The Nairobi conference/workshop was attended by delegates from 16 countries of independent Africa with consultants from Britain, France, USA, Sweden, East Germany and West Germany.

IV. Main Activities Proposed

The main functions of the Association over the next two years were agreed upon to include the following:-

(a) To get financial backing for the Association and enter into appropriate relationships with bodies like ECA and UNESCO;

(b) To publish the proceedings of the Nairobi meeting;

(c) To set up a documentation centre at Nairobi, where the Association's Secretariat was to be housed;

(d) To hold two training workshops on the writing of correspondence courses — one in Anglophone and one in Francophone Africa;

(e) To conduct a survey of the activities of commercial correspondence colleges in Africa;

(f) To develop a code of ethics in correspondence education.

V. Problems and Constraints

Right from the outset, the Association was faced with financial problems because, apart from membership fees from individuals and institutions, no other sources of funds were available. World-wide inflation hit most countries and international agencies and foundations, and hence the expected sources of financial aid including African governments produced nothing. A few institutions and individuals paid their subscriptions for the first few years (see Treasurer's report), but there was no money available to carry out the proposed programme of activities. One exception to this was the preparation and publication of the proceedings and the papers presented at the Nairobi conference for which UNESCO had provided a grant of US$2 500. This publication which consists of 16 chapters and edited by Nsang Kabwasa is ready in the manuscript form and was supposed to be ready for the meeting in Addis Ababa held on 3-15 September 1979. All the other activities were shelved for lack of finances and of a full-time Executive Secretary as had been anticipated.

Temporary accommodation for the Association was provided by the University of Nairobi at the Correspondence Course Unit. The Association was registered in Kenya under the Societies Act (1968) on 6 August 1973. An external account for the Association was opened at the Barclays Bank in Nairobi, Kenya, for which the signatories were the Treasurer and any one member of the Executive Committee.

In August 1973, the newly-elected chairman left Kenya for Britain on study-leave for two years and little activity was experienced during this period. However one letter of information was sent all members of the Association and other interested organizations on 22 October 1973.

In March 1976, a senior consultant in Distance Education was appointed by the ECA to assist the ECA and the AACE in promoting manpower training in Africa through correspondence education and related mass media techniques.

In June 1976, the Chairman sent out an application for a research grant to conduct a survey of commercial correspondence colleges operating in Africa, but no positive response was received from any of the organizations contacted.

Towards the end of 1976 the Chairman approached the ECA to seek funds to enable the Association hold its general meeting and elections according to the Constitution. At the same time, he had obtained an assurance from the Government of Mauritius for the amount of US$12 000 to meet local costs if the meeting were held in Mauritius. But no funds were found to meet travel and accommodation expenses for participants from member institutions, and so the general meeting could not be held as scheduled.

An approach was made to the AACE by the newly-formed African Adult Education Association whose headquarters are in Nairobi to share the secretariat facilities provided the AACE was willing and able to meet part of the cost of running the secretariat. This was not possible due to lack of funds. Arrangements were made with the publishers of the book, _Correspondence Education in Africa_ edited by Kabwasa and Kaunda for the royalties to be paid into the bank account of the Association, but to date, no such funds have been received from the publishers, Routledge and Kegan Paul Ltd.

In order to retain the legal standing of the Association, the Chairman pleaded with the Attorney-General of Kenya to allow the Association to exist until the end of 1979 by which time a general meeting and fresh elections would be held. This plead was accepted, and the necessary fees and penalties for societies' annual returns were paid.

In August 1978 a project proposal was drawn up by the Chairman in consultation with some members of the Executive Committee and submitted to the ECA declaring intention to convene a combined conference and business meeting of the Association to be held at a convenient place before the end of 1979. The ECA explored the possibility of financial support from the German Foundation for International Development and the efforts were successful and

. it

the long-awaited meeting took place in Addis Ababa on 3-15 September 1979 during which elections were held.

VI. General Remarks and Recommendations

The Addis Ababa meeting should draw up a set of recommendations for the future of the Association and means of providing financial support for the programme of activities to be agreed upon. This programme should be modest and realistic and attention should be paid to the means and personnel for executing it. An annual review of the Association's activities should be included as part of the programme.

It is imperative that a full-time co-ordinator of the Association's activities be appointed as soon as funds become available to work under the direction of a Governing Body made up of the Association's Executive Committee and with the support and advice of the ECA.

The main areas of the Association's activities should be in training, production and evaluation of aspects of distance education in Africa, using as far as possible African expertise already available. Short-term consultancies could also be obtained from Asia and Europe if necessary. A careful costing of specific projects should be done with the guidance from ECA personnel for presentation to possible donor agencies for funding. All other activities of the Association including regular business meetings could then become part of these projects.

Intensive publicity of the Association should be carried out throughout Africa and the rest of the world. ECA should assist the Association in contacting national governments and institutions. Publication of a newsletter at regular intervals should also help in this publicity. But the action-oriented programme of activities will serve as the best form of publicity for the Association.

The Association should assist and encourage the formation of national associations for distance education throughout African countries. It should also continue to co-operate with other international organizations such as the ICCE and the AAEA.

Finally, it should be borne in mind that running an Africa-wide association is not easy as there are problems of physical communications and languages, not to mention different political ideologies and aspirations that exist. But given moral and material support, the Association should grow in strength. A central home for the Association should be set up so that the programme of activities could be better served and supported. The central home should also be conveniently located to serve both the Anglophone and Francophone Africa. In this regard, we would like to suggest that Mauritius would be most suitable.

I would like to record our gratitude to the ECA for all the encouragement and assistance received, and to the various donor agencies who have supported the work of the Association. We hope this assistance will continue and grow in magnitude. The outgoing Executive Committee have performed their duties well within the prevailing problems and constraints and they would like to wish the new Executive Committee greater success.

FINANCIAL REPORT AS AT 30 JUNE 1979

Expenses	in K.Shs.
Nairobi meeting expenses	2 100.00
Executive Committee Meeting	3 000.00
ICCE Membership Fees	4 000.00
Other Expenses (ledger & etc.)	85.00
Balance at Bank	3 366.95
K.Shs.	12 551.95

Income	in K.Shs.
Individual Membership Fees	1 326.80
Institutional Membership Fees	2 170.00
Credit Advice	8 895.15
Donations	160.00
K.Shs.	12 551.95

Recommendations from the AACE Executive Committee for Adoption by the Final Plenary Session of the ECA/DSE International Seminar on Distance Assembled at Addis Ababa, on 15th September 1979

Recognizing ECA's continuing interest in, and support for, the developme of distance education in Africa, and recognizing that AACE, through its Executive Committee, has drawn up its own programme of activities for th next three years, it is of paramount importance that these activities/ programmes should be co-ordinated.

It is therefore recommended that:

1. The AACE with the help of ECA, seeks funds for the appointment of a full-time co-ordinator who shall be an experienced African distance educator, to be responsible, under the supervision of the AACE Executive Committee, for the execution of the AACE programme and for its co-ordination and integration with the ECA Distance Education Programme for Africa.

2. If this proves impossible and if ECA itself is able to appoint an experienced African distance educator as co-ordinator of its Distance Education Programme for Africa, the Executive Committee of the AACE should be invited by ECA to be involved in the following ways to ensure the closest possible integration between these programmes:

   (a) the AACE Executive Committee should be consulted by ECA on the qualifications, job description and appointment of such a co-ordinator;

   (b) on appointment, the co-ordinator should as regularly as funds allow, visit, consult and co-operate with the Executive Committee through its Chairman and/or other members to discuss the progress of his/her duties;

   (c) regular papers on proposals and progress should be exchanged between the co-ordinator and the Executive Committee to ensure that these programmes are consonant with each other, and there is an integrated approach to donor agencies for support for Distance Education Programme in Africa and that, wherever possible, available African personnel and resources are drawn on for consultancy, training and other co-operative programmes;

   (d) the co-ordinator be invited to attend as often as feasible meetings of the AACE Executive Committee.

3.2o. Special Session of Asian Delegates

A group meeting of the Asian participants of the International Seminar in Distance Education was held on 13th September 1979.

After serious deliberations over the problems and needs of Distance Education Institutes in Africa, the participants identified the following areas in which some of the well organized Institutes of Correspondence Education in Asian Countries could extend co-operation to Distance Education Institutes, Universities, Organizations and the ECA.

(i) Consultancy and expertise for

a) setting up and organizing Distance Education institutes and for starting technical and vocational courses;

b) attachment of teachers of African Distance Education Institutes with some institutes in Asia for understanding the organization and working of correspondence courses;

c) course-writing, editing and preparation of course material for different subjects and different levels in English medium, particularly in subjects where cultural backgrounds do not very much e. g. Mathematics, Economics, Public Administration etc.

(ii) Sharing of information and experience through mutual exchange of newsletters, information booklets, prospectus, magazines, reports, proceedings of seminars/workshops and other publications.

(iii) Organizing a similar seminar in an Asian country. That would enable the African Distance Educators to visit and see the working of some of the correspondence courses institutes in Asia.

(iv) Preparing correspondence-courses for correspondence-course teachers.

Some of the points of contact which could be helpful in the implementation of these suggestions are:

The International Council for Correspondence Education, ICCE (India); UGC (India); UGC (Sri Lanka); Ministries of Education in respective countries, Commonwealth Secretariate and the well known Institutes of correspondence courses.

4. COMMITTEE REPORTS OF THE INTERNATIONAL SEMINAR

As it is mentioned at the beginning of this report, much time has been spent on committee session. The several committees worked on special forehand planned topics.

4.1. Committee I: Analysis of Experiences and the International Co-operation

4.1.1. Directions from ECA Secretariate

This committee was requested to focus on the following aspects: Major questions and problems to be discussed will focus on the participants' countries with special reference to administration, policy, staffing, funding, etc., of non-formal education, the role of commercial corresondence colleges, the development of government supported distance education institutions, the role of mass media techniques, distance education and the national systems of education, problems in the development of distance education, the relationship between distance education institutions and conventional institutions.

ECA's Distance Education Programme focussing on international linkages, establishment of linkages for technical co-operation, exchange of personnel, promotion of distance education (evaluation of the ECA publication "UNECADE" and outlines for audiotapes to be broadcast in Africa and Asia), short-term and long-term plan for co-operation, the use of Private Consultancy Firms in the establishment of institutions and advisory services for further development, non-profit making private distance education institutes and universities.

4.1.2. Composure of the Committee

DISCUSSION COMMITTEE No. 1

1. Miss Therese Shak - Hong Kong
2. Dr. E. Pereira - Singapore
3. Mr. B.C. Marumo - Botswana
4. Dr. J. Ansere - Ghana
5. Mr. A.T. Chele - Lesotho
6. Mr. K. Noyau - Mauritius
7. Mr. Hafiz Wali - Nigeria
8. Mrs. C. Leton - Nigeria
9. Mr. R.Y. Mwakatobe - Tanzania
10. Mr. T.H.B. Miyanda - Zambia
11. Mr. Phiri - Malawi
12. Mr. J. Skar - Norway
13. Ato Mamu Kebedde Shamkut - Ethiopia
14. Ato Selassie Dori - Ethiopia
15. Mr. R. Twite - United Kingdom
16. Ato Mahilemu Selassie Tadesse - Ethiopia
17. Getachew, Mrs. Elisabeth - Ethiopia
18. Mr. A. Traore - Senegal
19. Mr. L. Fonjo - Cameroon
20. Dr. A. Sahnoun - Tunesia
21. Mr. C. Grey-Johnson - Secretariate
22. Mr. A. Salim - ILO
23. Mr. Kilito - Morocco
24. Mrs. R. Mekuria - Ethiopia

A. Recognition of Distance Education (selling the idea)

The Group examined many ways by which distance education should be promoted in order to gain its rightful position in the entire spectrum of education and recommend the following:

I. Distance Education advisory committees should, to the extent possible, include prominent people and officials e.g. Vice-Chancellor, Permanent Secretaries.

II. The quality, both in content and layout, of distance education materials should be of a very high standard.

III. As far as possible distance education institutions should be independent with their own governing councils to direct the way they should grow and operate.

IV. Where possible mass media should be employed to publicise and promote distance learning systems.

V. Good films should be made to publicise distance education. Mauritius, Morocco and Ethiopia who already produced films to be involved in this exercise.

VI. Distance learning institutions should be given the authonomy to develop their own expertise.

VII. Distance learning institutions must break through barriers, i.e. offer programmes that are normally absent in the traditional school system curriculum.

VIII. It was further agreed to recommend that the African Association fo Correspondence (Distance) Education be charged with the responsibility of initiating the production of an Information Handbook on Distance Education and that at an appropriate time in the future a Journal of Distance Education be established. That the AACE should seek the support and advice of the International Council for Correspondence Education to that effect. The content of the Distance Education Handbook to be decided at a plenary session. The group further recommended that AACE approach UNESCO, ECA and the German Foundation and request them to fund the costs involved in 6 and 8 above.

B. STAFFING

It was noted that the three categories that usually have staffing deficiencies both in numbers and professional training were:

I. The academics who produce materials for distance education at various levels;

II. The administrators who should ensure that the system serves the purpose it is intended for; and

III. technal staff, who maintain the systems were the most effected areas.

__Recommendations__: that distance learning institutions should adopt a principle of exchange of information on job descriptions, staff recruitment methods and condition of service for these categories of staf This might help to improve the staffing standards.

Staff Training

I. The group noted that this problem was being handled by group 2 but wished to recommend, in case group 2 does not include this, that training teams on distance education be established to organise seminars from time to time. These action might achieve two purposes of staff training and that of promoting the image of distance education supported by international agencies, e.g. ECA, UNESCO, etc.

II. It was further recommended that distance education staffing system should be professionalized and be intellectualized in the same way as conventional colleges and universities are.

C. ADVERTISEMENTS FOR POSTS

These should specify qualifications required for a post in a distance education institution and, possibly, require someone who has gone through a distance learning system. Experience has shown that people who have themselves gone through a distance learning system tend to understand and appreciate this system and can fit into the system well.

D. PRODUCTION OF EDUCATIONAL MATERIALS FOR DISTANCE EDUCATION

It was noted that this heading included, among other items, course work, charts, graphs, textbooks, audio-visual materials (typewriter duplicating machines, staples), the collating and assembling processes, the editing process, etc. All of these are essential in the production system. Items such as printing machines and typewriters can be very expensive and should be carefull estimated for including maintenance costs. Several suggestions were mentioned that could be taken to minimize some of the costs particularly in those distance education institutions yet to start and the young and growing ones.

E. CO-OPERATION IN EDUCATIONAL MATERIAL PRODUCTION

Within the context of distance education, the group suggested and recommended the following methods to be tried:

I. Exchange of materials. Although educational materials produced by one institution in a given subject cannot be all used by another institution in the same subject, certain parts may be adopted and other parts be modified for use.

II. It was also noted that exchange of materials could be useful as a model on how the presentation of the subject-matter, layout, illustrations, etc. are done.

III. With particular reference to the emerging and growing institutions, exchange of materials and co-operation could se a useful purpose not only in minimizing the costs but also as an indicator of the sort of equipment basically required to facilitate the running of a distance learning institution, including the cost of such equipment and therefore enable the budgeting for such a more realistic estimation.

IV. Caution to New and Growing Distance Education Institutions

These institutions should bear the following in mind:

a) They should try as much as possible to have their own basic and minimum equipment and not wholly rely upon borrowing or having their work done by other bodies.

b) They should try as much as possible to harmonize their relations with other bodies doing a similar work.

c) They are further advised to start with modest machinery. The tendency is to be over ambitious and embark on big projects without the necessary resources both in skilled manpower and funds and soon fall into difficulties. The relationship between the demand and what they wish to do should relate to the strength of the resources available. It is recommended, for example, to buy two simple printing machines rather than have one large complicated and expensive one. By doing this, you ensure self-reliance because you will always have something to fall back to in the event of breakage.

d) Buy equipment (machines) that are easily replaceable and can be serviced locally and guard against misuse of institutional property.

V. The group would have concluded this section of their business by discussing matters pertaining to staff training but noted that group 2 was dealing with that aspect.

F. DISTRIBUTION OF MATERIAL

The group looked at the distribution of materials in two main categories, namely: local distribution and international distribution.

i) Local Distribution

Local distribution was understood to involve the movement of educational materials between the tutor (institute) and the student. It was noted that most of the commercial correspondence colleges despatched all their lessons as soon as the student paid all his fees. This method was found to be unsatisfactory in that:

a) There was no follow up whether or not the student studied and understood the materials.

b) Some students studied only those aspects of the course that they either comprehend or was of particular interest to them.

c) There was no communication between the student and the tutor (institute), hence the student did not get any guidance with the result that the drop-out and failure rates were alarming.

The group cited a number of ways by which materials could be distributed and these are:

1. That written materials be distributed to the students in installments in a sequence. The advantages of this system are that a systematic sequence is introduced to the student so that he is studying from one lesson to another in a coherent manner.

2. It gives both the student and the tutor (institute) a chance of communication in that the student does not proceed from one lesson to another unless he has studied and submitted his assignments for marking. The remarks made by the tutor and the marks gained do not only motivate the student but also guide him. In this way the student sees where and why he has gone wrong and builds up confidence.

3. The tutor is able, as assignments are submitted from time to time, to study the student's progress and helps the student as he goes on. These submitted assignments for marking act as an indicator on the quality of the course generally and on specific areas that are difficult for the students to follow.

4. Radio/Television

Radio and television as support services were regarded as being useful with a note that people do not always listen and watch respectively programmes at a given time.

ii) Institutional Distribution

The distribution of distance education materials at this level whilst very necessary and essential would be a big task. Firstly there would have to be a homegeneous working relationship at an international level

Secondly, the services of UNESCO would have to be solicited. It also calls for a thorough examination of the magnitude of the task in terms of equipment, the setting up of a distribution centre and the resources in both manpower and finance to rune the centre. It was however recommended that the possibility of setting up such a centre be investigated. The centre could be an informational clearing house. This might involve the sharing of copy rights and the adaptation of materials.

It was finally agreed to recommend that ECA be requested to set up a centre which could do both the collecting of materials and catalogizing it and that the centre might achieve the following:

1. Encourage collective production of materials

2. Facilitate exchange of courses at a much wider level

3. Facilitate further information on how to produce course materials of a high standard acceptable in a larger international framework.

It was finally agreed to recommend that institutional annual reports on distance education be sent to other distance education be sent to other distance education institutions.

G. Communication with and Feedback from Students

The group re-affirmed that communication between the institution and the student was the basic element of distance education. However, this has not always been easy. The use of written materials, television and radio all have a relation to the quality of staff and therefore staff training implications are engraved. Effective communication should take place, as near as it may be practicable, at the place the student lives. Students can be assisted fully if the institution knows their problems. This can be done by research and regular surveys on students problems. Once we know the problem of the student then an effective mechanism of communication can be devised to help the student.

Distance education institutions should inculcate into their students a sense of belonging. Once the student feels he belongs to and is a part of the institution he will not only talk to his friends about it but will also wish to know what is happening in the institution, what future plans are and will always associate himself with it and this breaks some of the communication barriers.

Radio: tutors and students can be interviewed on their various activities relating to the college and be broadcast over the radio.

i) Communication through Written Materials

a) The language used in course writing should be simple and understandable.

b) To achieve 1 above training of staff is involved but it is being dealt with by group 2.

c) The objectives of communication between the institute and the student should be clear to ensure that the student reacts.

d) Tutors should not be allowed to write discouraging remarks or make unpleasant comments on students work.

e) It might be ideal to establish a quality control section to check on the work of the tutors.

f) Both the tutor and the student should be motivated perhaps by creating incentives for good work.

g) Tutors should be encouraged to do some of the marking to bring them closer to the students.

h) There should be guidelines for tutor markers.

i) Assign enough marking load to tutors so that they can pay attention to individual student's work.

ii) Administrative Services in Promoting Communication

The administration of a distance education can go a long way in promoting communication processes. This can be done in many ways:

1. Promote and encourage regular contacts between students and their tutors.
2. Create tutor-student relation which can sustain students interest and progress.
3. Administrative processes should be promptly attended to without any delays.

4. Students councelling system should be trained in order to know the methods that can sustain interest.

5. The administrative staff should be aware of their role to fulfill certain obligations.

6. Tutors can do their work satisfactorily if they are materially motivated on good payment and allowances.

7. Finally the institutions' interest in a follow-up of those who completed their studies can also go a long way in attracting students and creating a good image for the institution as much as the publication of students who achieve promotion and exceptional good examination results.

H. Area of Co-operation

It was noted that proper use of the proposed information handbook and a journal of distance education could be the source of co-operation..

I. Funding

The group noted that there were so many types of distance education institutions funded from various sources:

(i) Independent ones with a governing council.

(ii) Parastatal ones with a governing council subsidized by government.

(iii) Institutions that were wholly government departments run on government policy.

After assessing the merits and demerits of all these systems, the group wished to recommend that for distance education to do well and achieve the distance education concept and objectives, they should be parastatals for the following reasons:

(i) Develop expertise and professional attitudes in distance education personnel.

(ii) They can generate funds on their own to meet some of the costs that governments would normally not make funds available for.

J. Funding and Organization at International Level

The group supported the idea that there be an international machinery to fund and organize distance education. The mechanism and the magnitude of how this could be done were issues to be resolved. The establishment of an all African Centre seemed rather ambitious even if the funds could be made available from some source. This, it was noted, would require the procurement of a site, large sums of money for capital investment, specialized personnel and their housing and salaries. This did not seem to be anything which could have immediate effect.

The other idea was that we start on something modest which can take immediate effect and grow as we go on. It was evident that the group wished to recommend that a successor to Dr. Hakemulder be appointed so that the recommendations arrived at in this Seminar can be implemented and possibly a permanent arrangement affiliated to ECA be established on the promotion of distance education. It was further agreed to recommend that this Seminar draws up a list of practical issues that we would like to have workshops on for immediate action.

A final recommendation was that ECA be requested to contact African governments to raise funds for setting up a centre to promote distance education.

Discussion on Mr. R. Twite's paper was deferred until a draft of the minutes was read so that only ideas not already included in the minutes could be added.

Evaluation of our programme for action at the end of this Seminar was recommended.

K. Recommendations

(i) Recognition of distance education:

a) that the African Association for Correspondence Education be charged with the responsibility of initiating the production of an Information Handbook on Distance Education for which an editorial panel should be designated by the Seminar;

b) that at an appropriate time in the future a Journal of Distance Education be established. It was suggested that the AACE should seek the support and advice of the International Council for Correspondence Education to that effect;

c) that a film with adequate supporting literature should be produced to promote distance education showing what it has been able to achieve in a number of countries. Morocco, Ethiopia and Mauritius who already produced films to be involved in this project.

(ii) Staffing:

That distance learning institutions should exchange information on job descriptions, staff recruitment procedures and conditions of service. This information could be included in the proposed handbook .

(iii) Training:

a) joint workshops, visits and attachment training should be organized for the benefit of educators, administrators and specific categories of technical personnel;

b) consultancy and advisory services in course programme and instructional material development as well as in other aspects of distant education should be provided from a pool of experts preferably recruited from among Third World countries but also from institutions outside where the methods used are recognizably of a standard from which benefit can be gained.

(iv) Production of Materials:

a) joint course writing workshops to be organized for the design and elaboration of course materials;

b) exchange of instructional materials and model courses at nominal fees to cover postage and printing costs. Institutions should be prepared to exchange materials at a nominal cost with the possibility of sharing copy rights;

c) Information Bank on Distance Education Materials: this could start with a simple catalogue of available materials to be compiled and circulated among interested countries so that they can make their own arrangements for exchange.

(v) Equipment:

A survey should be carried out of equipment in use in African institutions with a view to determining which makes of equipment, e.g. printing machinery, audio-visual production equipment, are cheapest and have stood up well in African conditions. Such a survey could usefully include information on the utilization and output of such equipment as well as maintenance problems it has encountered.

(vi) Organization and Funding:

a) a co-ordinator should be appointed in a full-time capacity and with adequate supporting staff and office facilities to organize and co-ordinate a programme of co-operation for Africa (to be called Distant Education Programme for Africa) and to channel projects to funding agencies;

b) the programme co-ordinator should work under the direction of a Central Governing Body (which should be the AACE Executive to be elected today). The Central Governing Body will review the progress of the programme(s) once every year and make its recommendations;

c) African governments, ECA, World Bank, etc. should be requested to put in money for the development of distance education in Africa;

d) African institutions will meet once every two years to receive progress reports and to elect a new Executive. A part of the programme activity will be to publish a professional journal regularly. It could also undertake production of the handbook;

e) ECA should be asked to obtain funding from donors to execute the programme(s);

f) as far as possible, African expertise in distance education will be utilized to carry out the assignments, consultancies, etc.

(vii) Follow-up Conference:

A follow-up conference of a similar nature to the present one should be organized to enable the group to review progress.

4.2. Committee II: Staff Training and Development

4.2.1. Directions from ECA Secretariate

A very important question to be answered will be connected with the role of the Distance Tutor (who he is, what he does and needs and how to train him). In this respect, the following topics were proposed for discussion:

The Distance Education Programme of ECA with focus on training aspects, evaluation of and comments on the correspondence course for correspondence course writers, suggestions for other correspondence courses to be developed in a central place, involvement of African/Asian universities in the training of distance tutors and other personnel, the development of a strategy for training courses - national and sub-regional - based on the Handbook for Distance Educators, short-term and long-term plans for training of distance educators. Establishment of a private non-profit making organization for the training of personnel for African/Asian distance education institutions, outline of a curriculum for the training of distance educators.

4.2.2. Training of Staff by Distant Education

I. Introduction

To make the best use of Radio Forum Clubs we need first to have a competent staff. This means the staff in the centre but also field staff that is discussion leaders, have to be trained. Since we try to educate people up-country by Distant Education methods- in this case radio combined with discussion groups - we can analyse the question if it is possible to train the necessary staff by D.E. methods. In most cases the training of staff is done by traditional face-to-face teaching. But is it also possible to develop a general and regional strategy on a similar philosophy for this continent? If we can agree on a basic philosophy, is it then possible to combine efforts and try to use the same curriculum and strategy in a number of African countries? I want to present some thoughts about this item.

Firt of all, I should like to develop a theory of education combined with practical ideas based on this theory.

2. Model of "Didactical Analysis"

The main questions on curriculum development, preparation of lessons and courses are:

(i) What do I want to achieve with my education? (objectives)

(ii) Where am I to start? (entering situation)

(iii) How can I teach?

a) How do I have to choose and to arrange the subject-matter (subject-matter of teaching).

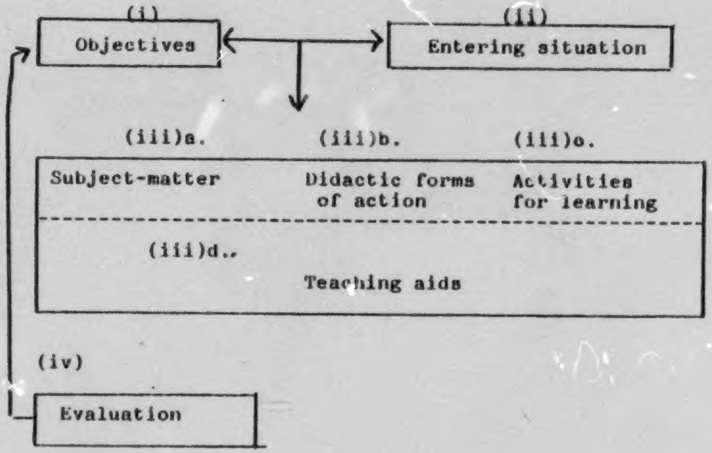
b) Which didactic forms of action (ways of teaching) (Didactic Forms of Action).

c) What kind of learning activities have to be executed by the students (activities for learning)!

d) What kind of teaching and learning aids I have to use (Teaching aids and media).

(iv) What are the results of my education? (Evaluation).

Model


(i)
Objectives
(ii)
Entering situation
(iii)a.
(iii)b.
(iii)c.
Subject-matter
Didactic forms of action
Activities for learning
(iii)d..
Teaching aids
(iv)
Evaluation

Again and again we have to ask ourselves about objectives, entering situation, content and organization of teaching-learning situations and the evaluation of results. Important is that the model Didactical Analysis offers a structure of thinking for all educational and training work. As it was said before, this scheme can be used also for the development of a curriculum and for the preparation of one lesson.

3. Development of Curriculum based on "Didactical Analysis"

Our objective is to find out if we can use D.E. Methods for staff training. This means that our premise is that of point d. Teaching Aids in the Model Didactical Analysis is fixed. To define it in more practical details we make a choice among the many D.E. strategies: a course for adult training, based on a Radio course combined with written material. For the radio course we can also choose the preparation of tapes, to be used during a residential course. In this way we combine the spoken and written language for the training of staff.

3.1. Objectives

The problem of objectives is a very complex problem. We face the following problems:

a. Problems of formulating: We can do that in general terms, that is to say: "We want our staff to train farmers to develop a better way of life".. But we also can do it in more specific terms: "Our aim is that the staff members train farmers to free cows from ticks."

In my opinion the general formulation can be helpful to identify specific aims and goals.

b. Problems of inventorization: Here we try to list educational objectives. One has to decide which kind of changes in attitudes and behaviour are desirable, what knowledge is needed etc. After listing all objectives, one has to make a choice.

c. Problems of classification: One has also to develop a classification scheme. The chosen objectives have to be classified in groups following the personality aspects with which they are related. There is a diversity of psychological aspects. Some of the objectives are related to memory, others are related to the development of thinking; again in others one wants to change attitudes.

d. Problems of evaluation: Which we can summarize in the question: are the chosen objectives still correct? The crucial problem is that in a changing society a constant revision of educational objectives is a necessity.

After this small part of theory on educational objectives I should like to go to the practical side.

In Cairo 1975, there has been a conference of the Association of Faculties of Agriculture in Africa. Mr. L.S. Cobley presented a paper on the topic: The required qualities of teachers in agriculture at all levels. Because of the fact that in my opinion the work of our staff, especially the extension staff or field staff, is related to the teacher in agriculture on the simplest level, I have the impression that we can analyse the formulation and inventorization of the objectives Mr. Cobley stated at the conference. The objectives are:

(i) A thorough mastery of subject-matter
(ii) Knowledge of the relation between the special subject with the total curriculum
(iii) Awareness of objectives of his teaching, related to the needs of the students
(iv) A knowledge of Educational Technology: the use of teaching aids
(v) Personality aspects and qualities as patience, understanding and humility
(vi) Enthusiasm
(vii) A knowledge and experience in techniques of group communication
(viii) Job satisfaction

I suppose it is not my task to criticize the above mentioned objective. It is an example. But I should like to ask you to analyse the objectives critically and to formulate objectives for training the staff of the radio clubs.

3.2 Entering situation

The entering situation is the total of personal, social, educational and situational data, which may be of importance in respect with the realization of educational objectives.

Education and training have to adapt themselves to the world of existence and experience of the students.

But not only the students are important in relation to the entering situation, but also the lectures and several situational data are important. This means that we have three categories of the entering situation:

(i) the students: Education, level of knowledge, intelligence, interest, mastery of language, motivation, self-reliance, creativity, physical condition, etc.
We need to know something of our students. Therefore I should like to ask you the following question:
"How can we describe our students, e.g. the staff members who need training"?

(ii) the lecturers: Because of the fact that we do not use face-to-face teaching in distant educational methods (correspondence education and tapes) we need to know the special problems of this method.

Question: Can you list special problems facing the students by using Distant Education? How can we solve these problems?

(iii) Situational data: Here we list for example the following data: time available for study, social and cultural circumstances.

Question: Can you list some relevant data in connection with the training of staff?

3.3 Subject-matter

Two criteria are very important:

A. Choice of subject-matter

B. Arrangement of subject-matter

A. Choice of subject-matter

The criteria for the choice of the subject-matter are based on the Model Didactical Analysis.

(i) A purposeful choice: The most used and simplest way in the search for criteria for choice of subject-matter is to list a number of demands. One has then to choose these criteria which guarantee the realization of the objectives.

(ii) A choice determinated from the Entering situation:

Here we try to adapt the subject-matter to the level of education of the students.

(iii) Choice for the scientific structures of the subject: Each scientific subject has its own structure and characteristics. The structure of mathematics and sociology for example are quite different and this influences the teaching methodology. With the choice of subject-matter we have to take that structure into account.

(iv) A choice from the angle of cultural-dynamical determination and from the social usefulness

With the cultural-dynamical determination we mean that the subject-matter is chosen out of the available cultural goods, but also with a view on the needed future changes. Another principle is that the content of the subject-matter has to have a practical social value. This means that the subject-matter makes it possible for students who have finished the course to do their jobs in the society. After this theoretical information I should like to give again a practical example and to invite you to give your opinion. Prof. Osman (Cairo Conference 1975) stated that agricultural teachers need pedagogical training in a number of disciplines, including

(a) philosophy of Education

(b) psychology

(c) rural sociology

(d) construction of teaching programmes

(e) teaching methodology

(f) the use of audio-visual aids.

My questions to you are:

(i) Do you agree that our staff member also need a pedagogical training?

(ii) And if you agree with that, what is your opinion about the topics Prof. Osman stated for a curriculum: Which topics are not relevant and which have to be included?

B. Arrangement of subject-matter

We can distinguish two main streams of arrangements of subject-matter:

(i) An arrangement on subjects

The above mentioned needs for agricultural teachers by Prof. Osman is in accordance with this principle: Philosophy, psychology, sociology etc. It is, however, also possible to follow:

(ii) An arrangement in projects

One can choose a number of topics and relate these topics to philosophical, sociological and educational aspects of the particular topic. For the training of the staff members, we have to decide in advance which kind of arrangements we prefer. Therefore I should like to give you the next problem: Which arrangement do you think give the best results in training staff member? We have to relate our answer with the chosen media and the objectives.

3.4. Didactic form of action

In the classroom situation we can distinguish a number of teaching forms: lectures, demonstrating, discussion techniques, etc. Is it possible to combine some forms for our students since we have decided to use Distant Education methods? I think we can! Instead of the lecture we make use of a correspondence course. The spoken language is replaced by the written one. But by using tapes in training centres we can also make use of some of the lectures by oral teaching.

Demonstrating can be done by including photographs, designs, graphs, etc. in the correspondence lessions. On the tapes we can record interviews, discussions and demonstration-lesson.

The discussion-techniques are somewhat difficult to handle in using Distant Education Techniques. Most of the time, however, we introduce one or two residential courses, where of course discussions can be held. The principle of discussions is the oral communication between persons. In distant education the two-way-communication is very important. Therefore such lesson contains a number of questions for the student to answer. The teacher has to send the answer after marking the scripts and give an answer to the student. Instead of an oral communication one establishes a written communication. In the correspondence lessons the students are given assignments, the same as in school - education.

The student can be asked to write an essay, to fulfil research assignments, etc.

In general I suppose that more or less the same didactic forms of action are used in one chosen Distant Education method, in comparison with classroom teaching.

Question: What kind of advantages/disadvantages has the correspondence lesson in comparison with a face-to-face lesson?

3.5 Activities for learning

By activities for learning we mean behaviour of the students in relation to the learning assignments, as far as this behaviour is directed to reach the planned objectives.

In all Distant Education courses the activity, self-creativity and responsibility of the student are stimulated. The student has to read or listen to the lessons. He is many times asked to criticize the lessons, or to give suggestions to improve lessons. This stimulates his critical thinking capacity. All kind of assignments are given to students, which they have to fulfill independently. The student has many questions to answer. Part of these questions are self-check tests. Another part he has to reply upon in writing and to send to his tutor. This is going to establish a "dialogue in writing" between the student and his tutor.

But also many other assignments are given to students, like research assignments, the preparation of drawings and designs, etc. From the psychology of learning we know the principles of the learning of concepts, principles, skills, problem solving etc. Most important is the idea of problem solving in modern education. Distant Education is using this method constantly.

3.6 Teaching Aids

We have accepted as a premise to use Distant Education for the training of staff members. After the former part I should like to ask you to list advantages and disadvantages of using this methodology. We can use these data for our discussions.

3.7 Evaluation

We can describe evaluation as the review of the value of the didactical action. In general we can distinguish two forms of evaluation:

(a) Product-evaluation: One is measuring the results of the teaching-learning process by evaluating whether the objectives have been reached.

(b) Process-evaluation: This is the evaluation of the teaching-learning process itself, that is, a critical review of the curriculum, the media the learning situation.

It is of vital importance to include evaluation schemes in distant education systems from the very beginning.

If we evaluate this paper it should be an advantage to use the data and to use these for the last question:

Can we develop a plan of operations to use Distant Education in the training of staff?

4.2.3. Composure of the Committee

DISCUSSION COMMITTEE No. II

1. Prof. K.V. Sivaya	- India
2. Dr. O.P. Kulshreshtha	- Sri Lanka
3. Mr. T. Dodds	- United Kingdom
4. Mr. P.E. Kinyanjui	- Kenya
5. Mr. T. Shale	- Lesotho
6. Mr. V.J.V. Mambu	- Sierra Leone
7. Mr. O.J. Matemu	- Tanzania
8. Mr. D.N. Okunga	- Zambia
9. Mr. Ession	- UNDP
1o. Mr. T. Rekkedal	- Norway
11. Ato Asrat Kebedde	- Ethiopia
12. Ato Kebedde Cabre	- Ethiopia
13. Mr. J. Citau	- Kenya
14. Dr. J. Bukhala	- Kenya
15. Mr. Chou Huant Yung	- People's Republic of China
16. Ato Cetachew	- Ethiopia
17. Mr. Palmer	- ILO
18. Dr. M. Pagbulu	- Nigeria
19. Ato Girma Hayouh	- Ethiopia
2o. Mr. F. Kaumbutho	- Kenya
21. Miss J.M.C.C. Peters	[illegible]
22. Miss E. Mellgren	- SIDA

4.2.4 FINAL REPORT

A Preamble

The first major issue which the Committee had to tackle was that of reconciling conflicting terminologies used both for the personnel in and the field of education which this Conference calls DISTANT EDUCATIO It was further complicated by the injection of the words DISTANCE Teachi into the discussion.

It was very clear that this was a serious matter with many members who felt the time had come for the issues to be resolved one way or the other. Under such pressures, the Committee examined the issues and recognized the following usages as being current in Africa:

DISTANCE TEACHING and DISTANT TEACHING
DISTANCE EDUCATION and DISTANT EDUCATION

While it accepted the use of DISTANCE TEACHING as being more appropriate for discribing teaching from a distance, it was not able to agree as to which of the two forms should apply to education being given from a distance.

If this were all, the matter would have been manageable, but a thi group emerged with the firm belief that there was no justification or rationale for the use of either word since radio education, television education or other terminologies like that did not exist for education acquired through the radio, television, etc. The Committee, in order to be able to discharge its responsibilities within the time available agre to pass on the unresolved issues to the PLENARY SESSION for resolution.

Another preliminary exercise which was undertaken early in the week was that of identifying and defining as precisely as was possible, twelv (12) different job titles applicable to workers operating in the field of DISTANCE TEACHING. This was again due to the variations observed in usage from country to country. In order to ensure that a uniform interpretation is applied whenever the need arises to use the titles of these workers, a list containing the titles, defining the functions, and speci fying the requirements for appointment to the posts is attached to this report as Appendix I.

Also attached is Appendix II which gives the Committee's Comments on the E.C.A. draft "Writing Correspondence Courses - 27th March 1979".

The Committee took cognizance of the fact that no institutions presently in existence offer comprehensive programmes for training those working in the area of DISTANCE TEACHING. This observation has greatly influenced the Committee's recommendations that 'on-the-job' training should be given as much as possible in training workers in the field.

The Committee feels that it is also important to stress right from the start that working in the field of DISTANCE EDUCATION demands a slightly different outlook and approach from those applicable to traditional educational systems. As a result of this difference, it must be accepted as a basic principle that anyone coming into the field of DISTANCE EDUCATION for the first time, no matter his antecedents, must be exposed to some relevant training to prepare him for work in DISTANCE EDUCATION, with its special requirements and demands.

A close look at the set up in any DISTANCE EDUCATION establishment impresses on one the complex networks or relationships that exist among various staff members and jobs. This basic difference which takes the teacher or worker from his star role in the classroom and reduces him to just one other important element in a chain of activities that leads the students to acquire new knowledge or skills, demands that all who are being prepared for work in DISTANCE EDUCATION must have built into the courses, activities which emphasize co-operation and foster team spirit. This is very fundamental and should be a serious and common content of any orientation or training course for would-be workers in DISTANCE EDUCATION.

It is realized that training needs will very from establishment to establishment. In particular, the needs of beginning DISTANCE EDUCATION establishments will differ from thos of large and well established ones. It is important to relate whichever training strategies are used for training to the situation and long-term interest of the institution.

Finally, the Committee wishes to draw attention to the mix of organizational possibilities that can exist. In an institution, one person may have responsibilities for three different functions. This may be due to many reasons one of which could be due to the smallness the institution. In another institution, one function may be split int two or more sub-functions for as many people. Because of this wide variation in practice, it is important to focus always on the job or function and not on the person or persons who perform them. Consequent ly, if one person has responsibility for two or more jobs, he may need to receive appropriate training in all these areas. It is apparen therefore, because of taried job/training requirements in such a situation there is the danger of either over training or under training personnel and consequently actual training requirements will need to be established by means of analysis.

B. Training

In view of the absence of institutions offering comprehensive programmes for DISTANCE EDUCATION personnel as noted above, it would seem logical to expect that those coming into this field for the first time must be doing so with qualifications and experiences acquired elsewhere. This thus provides a model which has many attractive aspec It should be easy to accept as a fundamental principle that forthe immediate future, all training for DISTANCE EDUCATION personnel shoul be viewed as having two components. The first component is that which can be acquired in established institutions like teacher training colleges and universities and fields like radio and television. The second and most relevant component is that which transforms and upgrad these workers into qualified DISTANCE EDUCATION personnel. This is th component which needs a special attention at this stage and for which efforts should be made to make available.

The advantages of offering basic training in established institutions are many. Any obvious one is that if a person has already acquired the basic skills, his special training in DISTANCE EDUCATION will be short and his readiness for active work correspondingly less. Secondly, there are certain types of duplication which are both unnecessary and expensive. In an age in which resources in Africa are not exactly too adequate, it might be a realistic approach to avoid creating any institutions specifically for the training of DISTANCE EDUCATION personnel, if facilities exist for such training or parts of such training either at home or abroad. Lastly, even where physical facilities can be provided, the universal shortage of highly trainined and experienced personnel is most likely to mean that the establishment of such an institution will either deplete the inadequate staff of existing ones or just carry on without such desirable level of expertise. In the light of these statements therefore, the Committee strongly feels that emphasis of training should be on those additional skills that cannot presently be acquired easily at existing institutions.

The Committee recognizes that basic training facilities are not even available in sufficient numbers in many African countries. As a result, the first level from which DISTANCE EDUCATION personnel will be drawn is likely to be lower in many cases that has been recommended in the attached Appendix. This is not seen as a very serious problem which cannot be surmounted. Where the basic qualifications are essential, training in other countries will be one solution. However, where possible, the beginning worker with inadequate entry qualifications can be trained on the job, as long as experienced and trained personnel are available to help him and take charge in his training under a planned programme. Again, where DISTANCE EDUCATION facilities are not available at home, training through attachment abroad under a clearly defined programme may be the answer.

The Committee feels that it must draw attention to a situation which might lead to an undesirable imbalance in the types of personnel being concentrated upon for training in the field of DISTANCE EDUCATION. Presently, emphasis seems to be on developing functional skills for use in DISTANCE EDUCATION situations. It seems important to the Committee that a corps of workers in this field should concentrate on developing the intellectual aspects, side by side with those being trained to develop skills and techniques.

In this respect, graduate courses should be developed at the universities for would-be workers in the area of DISTANCE EDUCATION. Further, opportunities should be generally created for research worke to examine the philosophy, techniques and other aspects of DISTANCE EDUCATION. The hope of the Committee is that this way, very brillia minds will be attracted into this field and be encouraged to make a career there.

Another fundamental consideration which the Committee addressed itself to, is that of the harmonious development of DISTANCE EDUCATI components. It is essential that all arms of any institution be developed in a balanced way. No component must be allowed to go too far ahead for other components either in concept or technology. The state-of-the-art point reached must be about the same for each group of functions at any point in time. What goes for an institutio also applies to the pool of personnel operating in any situation, be it a country or continent. It is pointless having the best writers in the world if your radio engineers cannot get the message unto the air waves. Apart from everything else, maximum effectiveness can only be achieved in any system if there is balance and harmony of the components.

As a basic principle of demonstrating absolute faith in DISTANCE TEACHING, the Committee feels that at least some part of the training of DISTANCE EDUCATION personnel should be through distance teaching. Further, this exposure gives the would-be worker a feel of what DISTANCE TEACHING is about.

The dearth of qualified personnel (especially in the field of education) is universal. Unfortunately, countries are still rapidly expanding their educational systems and are needing more teachers than they can train and keep. The Committee feels that a pool of retired professionals and teachers exist in some countries. These people are not incapable of being very active or useful, but for one reason or the other, they prefer to remain in retirement.

If they can be attracted by appropriate incentives like their being able to work at home and at their own chosen times; the extra income that is most likely to be needed by many due to inflation; being able to come into the main stream of educational experiment again, and so on, this may prove a much more reliable source of recruitment than others. Since they are already trained and experienced, their further training should be minimal and the other great asset is that they are not likely to want to transfer such experiences to other jobs. They are thus a stable pool which at least in the next few years could provide badly needed personnel for DISTANCE EDUCATION!

C. Development

The Committee views development as a continous process in contradistinction to training which is for a defined period of time only. It is felt therefore that workers in DISTANCE EDUCATION must not rely only on occasional training to update themselves and their skills. Continous updating should be encouraged at each centre through:

(i) the provision of well equipped resource centres which should be easily accessible to all staff members;

(ii) regular work-plan discussion groups;

(iii) scheduled in-plant seminars where problems and issues are exhaustively discussed and where results of personal experiements, or solutions which have worked, are transmitted to others;

(iv) occasional talks by experts either from within or without to update others who may not have had the opportunity to use more than one medium.

What has been said of an institution applies equally to a region, country or even continent. It is therefore necessary to explore the means of providing appropriate assistance for developing these centres wherever they are needed.

Development is a positive concept, and it can only be recorded positively if trained personnel do not go out faster than replacments are trained. This phenomenon whereby training is merely a passport to other jobs, and a higher salary, is too rampant in the very developing countries which need stable trained staff to man essential posts If DISTANCE EDUCATION is not to be added to the long list of developmental fields where instability and shortage of staff is one of the major constraints to expansion, attractive and competitive salarie must be advocated for its trained personnel, apart from ensuring a high status for them. Status can be assured by exploiting whatever is accepted locally as being a symbol of status. In some place, a persona car, official housing, an air-conditioned office, and official car, or any of the perks of office can make a difference as to whether a trained person stays or opts out. Relative to what is at stake, the offer of a few fringe benefits equal to what others enjoy should not be allowed to wreck the future of a whole people. Sabatical leave for writers' and editors is another benefit that could be extended.

As a further means of development, workers in DISTANCE EDUCATION should be encouraged to attend conferences as often as feasible. It is a good policy for senior staff members to spread such opportunities evenly and to allow their subordinates to take advantage of them. In most cases those who need to learn from conferences and meetings are not the heads but those under them who are still growing professionally and are in need of broadening their experiences.

The Committee feels that for the immediate future, all-round training or at least exposure to more than one function or set of experiences will be the rule for many workers in DISTANCE EDUCATION in Africa. It recommends that where feasible, job rotation should be encouraged. In fact, the experience of Educational Mass Media Services in Addis Ababa is a worth-while one to copy in this respect.

Finally, for rapid development, and consequent up on what has just been noted, the Committee recommends that job mobility upward across the board should be encouraged. All the issues raised in this report are consistent with this principle. It ensures familiarity with many components of the system and it is an incentive since it accelerates the upward movement of very competent persons.

D. Strategies

Various possibilities exist for training DISTANCE EDUCATION workers. However, a judicious mix of possibilities and the use of facilities will be necessary according to the needs and means of country or agency. In particular, the main types of possibilities are:

(a) On-the-job training incorporating staff exchange or attachment programmes

(b) Short-term courses
local
national
at regional levels or
continental universities
international

(c) Full professional training

As much as possible, training should not have the effect of depleting the pool of qualified staff members already on the job. Rather, training should aim at upgrading staff both quantitatively and qualitatively. This can be achieved if training acquired by one is spread down the line as far as possible. From time to time, those who have received their training in this way will have to go, if only briefly, to the source for further training. A view which the Committee finds attractive and which it strongly supports is that for a beginning, a directory of experienced Distance Education instructors should be compiled by a Coordinator. This shall be made available to the institution.

The Committee is painfully aware of the problems which many professionals in Africa have in getting their various governments or organizations to show very positive interest in DISTANCE TEACHING. Unless the countries themselves are organized and are ready to identify their needs, the proposal made above may not be of real benefit and could in fact become a wasteful exercise if the experts are all assembled and ready, with nowhere to go!

The present International Conference on DISTANT EDUCATION has proved necessary and extremely useful. The need exists for a continuous dialogue through regular seminars, workshops, and conferences, where pertinent issues of training and development will be discussed exhaustively and current practices reviewed.

Finally, channels for exchanges of information, developed materials and experiences for staff training (as distinct from a general pool for all aspects of DISTANT EDUCATION) should be established. It could well be a nucleus for the more ambitious project already discussed at the plenary meeting.

E. Recommendations

In addition to the various issued highlighted in this report, the Committee wishes to recommend as follows:

1. This Conference should issue a guideline as to the types of workers which are, or will be required in the training field of DISTANCE EDUCATION.
2. It should also define the type of training desirable and the broad content for each level
3. The Conference should recommend to participating countries, appropriate job titles for trained personnel in order to avoid the frustration.
4. The Conference should recommend to ECA the very great and urgent need for having a Coordinator to be responsible for organizing the training programme at the request of the institutions.

STAFF TRAINING AND DEVELOPMENT FOR
WORKERS IN DISTANCE TEACHING

The functions and requirements are as follows:

1. Lesson/Course Writer

Function:	Prepares and writes lessons assigned in his area of specialization.
Requirements:	Sound subject knowledge. Teaching experience at appropriate level. Ability to write in a manner understandable to the students at that level.

2. Instructional Technologist

Function:	Responsible for giving advice on the choice and use of media and methods for obtaining maximum effectiveness in the teaching and learning process
Requirements:	Sound basic training in instructional technology Proven experience in the design and production of teacher made materials

3. Editor

Function:	Assists in the development and finalization of the course material by ensuring effective flow, clarity, balance and sequence of the contents. He also ensures that the contents is conform to the course objectives.
Requirements:	Must have had some experience as a lesson writer or must have been an editor of an educational publication OR appropriate experience in journalism, publishing etc.

4. Script Writer

Function:	Adopts material for use in a visual and/or verbal format for effective presentation.
Requirements:	Basic training and experience as script writer in the appropriate media. knowledge of relevant visual and audio effect

5. Graphic Artist/Illustrator

Function:	Translates audio, verbal, printed and abstrac concepts into two or multidimensional, pictor and tactile illustrations to lessons.
Requirements:	Ability and training in visual arts. Training in Graphics. Basic Education

6. Subject Tutor

Function:	Evaluates and checks the assignments completed by the students and provides guidance and assistance through appropriate media.
Requirements:	Sound knowledge of the subject and appropriat experience of teaching at that level.

7. Student Advisor

Function:	Provides registered students with information in all aspects regarding non-subject matter.
Requirements:	Some experience in dealing with students or in disseminating information.

8. Guidance Counsellor

Function:	Advise students on subject choice in relation to career prospects and job opportunities. Provide effective liaison among tuitors, students and the institution. Provide professional counselling to applicant and students at both pre and post registratio stage.

Requirement:	Must have had training as guidance counsellor or experiences of adult education.

9. Programme Evaluator/Researcher

Function:	Conducts, try out of courses in preliminary versions by different means of data collection. Conducts large scale and small scale surveys Designs and conducts experiments on different aspects of distant education. Recommends necessary revision of material and teaching.
Requirements:	Training and experience in educational research including experimental and survey methodology and statistics appropriate to the social sciences.

10. Planner (Micro-level administrator)

Function:	To anticipate future needs and developments and to design appropriate programmes. To co-ordinate all activities in respect of the development and administration of distance education courses and procedures. To monitor effectiveness and deviations from targets or objectives and to propose appropriate remedies.
Requirements:	Administrative experience of educational institutions Training in administrative principles and/or educational planning.

11. Information/Marketing/Promotion Personnel

Function:	Helps create positive image of the organisation Disseminates information on various available courses through appropriate media. Assist in identifying sound and viable course offerings to suit the particular needs and aspirations of prospective students in a given time, space and cultural situation.

Requirements:	Knowledge and experience in the field of marketing.

12. Local Tutor

Function:	Provides on the spot linkages between the student and the distant teaching staff. Arrange appropriate local learning activities. Acts both as counsellor and informati officer at the local level. May be required to act as subject tutor and also to enrol correspondenc students.
Requirement:	Appropriate level of education and teaching experience. Experience in good leadership.

The comments on the ECA Draft "Correspondence Course for Correspondence Course Writers" will be discussed in a special publication on this topic. Together with this discussion the course will be published for use in institutions in Africa, Asia and Latin America.

4.2.5. A few notes on Terminology

We give hereunder some suggesticns on common terms used in discussions about distance education, concerning inter alia (i) method; (ii) organization; (iii) general education concepts.

(i) Method

Distance Education	- All activity with learning and teaching in the cases where the learner is at a distance from the teacher (or teaching organization) for all or most of the time devoted to learning, and special arrangements being made for tutoring at a distance.
Distance Learning	- The activities of the learner in a distance education system.
Distance study	- Distance learning, but used particularly often about university study at a distance.
Distance Teaching	- The activity of the organization supporting distance students, providing tuition and counselling.
Distance study course	- Study material developed to guide learning and to teach by the printed and/or recorded or broadcasted word, eventual supported with visual aids.
Course unit	- Part of a distance study course.
Assignment for submission	- Task in the form of problems to be solved questions to be answered, reports to be given etc., which are to be submitted to the supporting organization, where they are assessed and commented on as a kind of tutorial in writing (or on audio-tape) and returned to the student: this is the main type of two-way communication in distance education.

(ii) Organization

Formal education	- Education within or correspondence to official school or university education (at a distance or otherwise).
Non-formal education	- Education out-side official systems
Open school/Open university	- School or university without formal entrance requirements.
Extension work	- Educational activities of universities and schools aimed at others than the regular students or pupils.

etc.

(iii) General education concepts

Life-long education	- definition used by UNESCO
Permanent education	- definition used by the Council of Europe
Recurrent education	- definition used by OECD

etc.

4.3. Committee III: a) The Role of the Universities in Distance Educatio
b) African Network of Open Universities

4.3.1. Directions from ECA Secretariat

The directions on this topic were rather limited and left the committee members free in their discussions; it was formulated as follows:

"One group will concentrate on the methodology and practices in Distance Education Universities with emphasis on the establishment of an African Network of Open Universities."

4.3.2 Draft Discussion Project Document (ECA Secretariat) "The proposed African Network of OPen Universities".

1. Project Title: Proposed African Network of Open Universities.

2. Background

World-wide interest in distant education and open schools has increased dramatically. The essence of distant education systems is that they permit the materials produced by one teacher or a small group of teachers to be used by a very large number of students, scattered over a vast area. Teachers' salaries account for up to 90 per cent of the total educational budgets. High student-teacher ratio implies, from economical point of view, a considerable reduction in costs. Another aspect is school buildings. Most classrooms and other costly school premises are used very ineffectively for only 5 to 6 hours a day and for only 9 months in the year. A distant education system needs only a fraction of the school buildings in comparison with the traditional education systems.

2.1 Rationale for Distant Education

Many educational planners and political decision makers all over the world have come to realize that, where educational provisions of whatever level need to be expanded extensively and quickly, distant education can:

a. provide education and training for very large numbers of people more rapidly than traditional methods alone;

b. be highly cost-effective in comparison with traditional methods;

c. avoid the need for large population campuses;

d. help rural development and thereby reduce the flow of people from rural to urban areas;

e. improve the accessibility of higher education by making it available to a wider range of the populations. 1)

In UNECADE Hakemulder is presenting Distant Education as a "Universal New Educational and Cultural Approach to Develop Economically". In that publication he stresses the following advantages of distant education:

a. Spread. With relatively simple means many students can be reached, who are scattered over a vast area. For distant education there are no geographical coundaries;

b. Methodology for all levels. Distant Education can be used for the simplest as well as for the most difficult levels of education and training. But for correspondence education as such an understanding of the written language is a necessity. Some methods have been developed in distant education to reach even illiterates.

1) Report of the Conference of Executive Heads of Distance-learning Institutions. (The Open University, 1979)

c. Democratic. It is a way of education which can be reached by all citizens;

d. Life-long education. To develop, people need life-long education This pursuit, propagated by UNESCO, can be realized by means of distant education;

e. Formal and non-formal education. After the rather disappointing results of the traditional (formal) school systems, many developing countries have directed their hopes to non-formal education However, both forms of education should co-exist and should in fa be complementary. The methodology of distant education is suitable for both formal and non-formal education;

f. Economic. The formal education system is very expensive and demands too large a part of the national budget. With distant education not only many people can be reached, but they can be reached in a considerable less expensive way;

g. Efficient use of manpower. Teachers' salaries constitute the highest part of educational expenses. The highest qualified teachers can be used in distant education after a short period of re-training;

h. Quality. By using high quality teachers very good educational programmes can be offered at all levels. 1)

Many distant education institutions have already been established, and many more are in the planning stage. Some are designed to use innovative learning systems to fit into the national provision of educational opportunity. Others are designed as systems that make use of existing national communication networks. Nevertheless, existing institutions are inevitably seen as prototypes of other institutions, and a detailed examination of them can be helpful in discovering what features can be used in other contexts.

Next to this we have to keep in mind that many poor countries have neither the expertise nor the resources to develop the material for distant education, despite their desperate need for educational development. Therefore co-operation between rich and poor countries is a necessity.

2.2 The African situation

After the really disappointing results of the traditional formal educational systems, most of the educational planners in the developing world have directed their attention to non-formal education. 2)

1) Dr. J.R. Hakemulder:UNECADE, Some Thoughts on Distant Education. (United Nations, 1978)

2) Dr. J.R. Hakemulder: Teacher Education in Kenya. (Nairobi, 1974)

But in non-formal education there are already too many examples of failure and waste of manpower and finance, so that one gets concerned that political decision makers may cut educational budgets drastically. This is because it does not show that education really contributes directly to the economic development of the nations, that is, in terms of cost effectiveness. Therefore, in the opinion of many educational planners, the only solution for formal and non-formal education is that both systems have to make a real effort to use, on one hand the results of scientific educational research - such as didactics, pedagogics, andragogy and psychology of learning and teaching - combined with modern educational technology. It is also obvious that there is need for the development of a methodology for adult education.

2.3. ECA's role

Many African countries - around 20 - have already started with distant education systems. Most of the established institutions, however, need to be expanded and their services improved. Especially the training of distant educators, correspondence course writers, editors, distant tutors and institutional managers, seems to be a very big problem that African institutions are facing. In this connection ECA, in close collaboration with the International Extension College in Cambridge, has prepared a correspondence course for correspondence course writers. This course will be evaluated at the International Seminar on Distant Education in Addis Ababa to be held in September 1979.

Next to this distant course a Handbook for Distant Educators has been prepared under the auspicies of the African Association for Correspondence Education (AACE). This handbook will also be evaluated in the above seminar.

Apart from the 20 African countries which have already developed distant education systems, some other 20 countries have shown much interest in starting distant education and in introducing courses in different academic and vocational fields.

Many African governments have expressed as their opinion the need for "open universities". The problem, however, is that many of these countries do not have the expertise to develop the system and the teaching materials. Therefore it would be of immense value that possibilities are investigated to establish an African Network of Open Universities. A central organization will be needed to make the expertise available in the African Continent as a next step to channel information and expertise from African and industrialized world to the African Network of Open Universities.

The participants in the International Seminar on Distant Education, a joint effort of ECA and the German Foundation for International Development, are therefore requested to form a special working committee to formulate the aims and purpose of the African Open Universitie There will also be need to point out which subjects are most needed for the African countries and which of these subjects are most suitable for teaching-at-a-distance. Another topic will be the choice of the educational media and whether residential courses will be needed or not. After that a preliminary choice of participating universities has to be made; each of the selected universities will be responsible for an area of the continent. The strategy of the inter-African co-operation has to be another topic for the committee to be decided upon.

Regarding the inter-African co-operation ECA has already made a start. In the Multinational Programme Document various tentative guidelines have been given depending on the demands of the particular participating African institutes and on the technical, professional and financial possibilities of the overseas institutions. The strategies mentioned in the programme are the following:

(i) Summer vacation Courses, whereby one or more overseas universities are requested to send a team of 2-4 experts to Africa. With the assistance of local experts the team executes a programme of seminars, workshops and lectures at national and sub-regional level.

(ii) Peripatetic Team, whereby a team of experts from one or two overseas institutions travels to 3-4 African countries. The team gives advice to government officials and institutions and conducts short training programmes in specialized areas, such as organization of distant education systems, training of staff, finance of distant institutions etc.

(iii) Staff Training and -exchange Programme: African distant educator can work for 6-12 months in overseas institutes; an overseas specialist can be attached for 3 months to an AFrican institute.

(iv) Course Materials: co-operative development and exchange of course materials in which ECA functions as a distribution centre

The above mentioned programme has to be elaborated upon to be expanded and the lines of communication to be improved. Up till now 14 African institutions have a linkage one way or the other with 11 American and 3 European institutions.

3. Description of the Project

Based on experience and research in Africa we would like to propose the following:

3.1 Distant Universities

The system of distant education at university level was established to share a role in the spread of school education. The nature and position of distant university education may be briefly outlined as follows:

a. Distant university education opens the gates to a university education and to the public at large, aiming at the democratization of education and equality of opportunity.

Instead of the traditional classroom-centered school education in which students are gathered on a campus, this is a system whereby a person finding it difficult or impossible to attend classes can receive a university education even on a long distance. For this reason distant education has adopted new methods of instruction in which the use of the media is essential. "Media" for most of the times include postal service and broadcasting.

Distant university education opens up complete university courses and it grants an opportunity to persons for whom university education was previously no more than a dream.

b. University distant education courses have to be regular courses within the framework of university education, and have to be conducted to the same standards of quality as full-time courses.
Even though university distant courses may be conducted by correspondence, they are an integral part of the regular university courses. The establishment of university distant education courses has to be provided for in the University Establishment Standards and the special characteristics of distant education are provided for in the University Distant Education standards. The latter, in particular, have to be stringent in their prescription concerning the maintenance of standards; requiring that standards should not be inferior to thos of full-time courses. Credits gained by distant education have to treated as interchangeable with credits gained through fill-time attendance at university.

c. Distant education courses are to be established parall to the full-time courses within the parent universitie faculties or departments. This means that there should be neither universities nor faculties or departments offering courses only by distant education methods.

As is apparent from this, university distant education courses are set up, on the responsibility of the university faculty and in accordance with its politica on the basis of the staff structures, and educational facilities and equipment belonging to the faculties and departments themselves. This means that staff structure, facilities and equipment must provide fully for the smooth operation of distant teaching. The difference between full-time courses and distant courses has to be merely one of educational method.

It should also be apparent that in this proposal we ha chosen the American type of "University-without-walls" or the "Extension Universities". In our opinion the establishment of independent distant universities, suc as the British Open University and the German Distant University, is not appropriate for the African situati

d. To achieve distant university education several forms of educational media are to be used.

Because instruction is given to students residing over a very wide area, it hardly needs to be pointed out th a variety of appropriate media are to be used. Instead of classroom teaching, teaching by correspondence is brought in. At the outset, "correspondence" almost always meant "by mail", as the distribution of printed teaching materials in lieu of lectures, the presentati of assignments based on the material studied and their return to the student after grading and addition of comments by the tutors all rely on exchanges by mail. Today, the development and spread of techniques in communications has made possible progress towards the use of radio and television and also audio- and even videa-tapes, and the term "correspondence" is now commonly understood as a general term covering these communication media as well. To avoid misunderstanding however, we use the term "distant education", which means that "the learner is at a distance from the teacher for much, most or even all of the time during the teaching-learning processes".
Trenaman has made a comparison between educational results by use of print, radio and television.

One of his major conclusions is, "that among a group of programmes which varied widely in effect, the difference between television and sound broadcasting versions, or between either of these and the printed forms, were slight or negligable compared with differences arising from other causes". In particular, the visual factor which, it was expected, would mark off television from other media, did not prove to be significant.

The same conclusion can be found in the research study of an American team Chu and Schramm.

Hakemulder gives an analysis of the instructional medica in the Correspondence Course for Correspondence course Writers.

On the basis of this evidence it seems to be the best solution for the African Network of OPen Universities to base the educational instruction and teaching on two media, namely:

A. the printed word. Here is has to be decided upon if the African courses will either be by the use of handbooks supported by guidance-in-writing by university tutors - as most American University Extensions do - or by complete correspondence courses with reference to scientific literature - as most European Distant Universities do.

B. Audio materials, such as radio broadcastings and audio-cassettes.
The visual part, necessary for some courses, can be included in the printed materials.

e. University distant education plays a social educational role by opening the whole or a part of a university course to the public, irrespective of admission qualifications. In this way the distant university courses seek not only to be regular university courses, but also fulfill a social education role. As regular courses, qualifications for admission and graduation are stringently prescribed, but in the sectors that serve a social education role, the way is laid open to a student taking all or part of the desired course according to his ability, irrespective of qualifications. We have here two systems:

(i) The special enrolment system. This gives a person not possessing university entrance qualifications an opportunity to receive university education. The student is permitted to take classes in the regular course, but is not granted graduation qualifications even on completion of the entire course.

(ii) The single-subject system. This is a system by which the student is free to select from specified subjects. No qualifications are required, but regular credits are not gra ted. For the most part, this system is used to gain either a vocational knowledge or a general education.

3.2. Organization and management

As university distant education is not set up in independent distant faculties or departments, but set up instead within the parent faculties or departments parallel to regular courses, it does not, as a matter of fact, have any organization of its own. However, there are certain peculiarities in the administration and operation of distant education that are not seen in full-time course In order to take optimum advantage of these, distant divisions are organized to undertake administrative and operational functions and distant course sections are detached from the full-time sections. This does not detract from the fact that distant courses are basical conducted on the responsibility of the faculty or department in accordance with its policies.

3.2.1 The position within the university

The position of distant education courses within the university as a whole and in the faculty Academic Regulations can be stipulated as follows:

(i) A chapter on "Distant Education" may be inserted stipulating the following matters in three articles: (a) that courses of distant education will be incorporated within specified faculties; (b) that academic regulations pertaining to distant education will be specified elsewhere; and (c) that the operation of distant education will be carried out by the Distant Education Division.

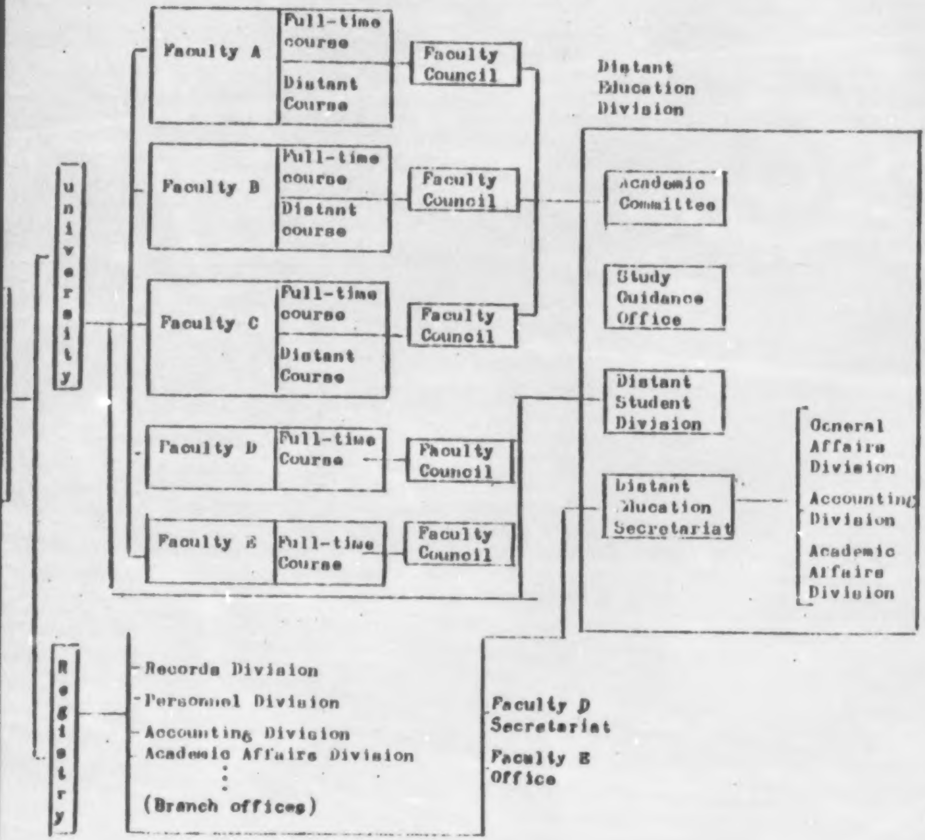
(ii) In the chapter on "Staff Organization", it is stipulate that a "Division Director shall be appointed in the Distant Education Division".

(iii) In the chapter on "The Council", the Director of the Distant Education Division is added as a member of the University Council (convened by the President who acts as Chairman to debate all academic matters. Membership consists of the President, trustees, deans of each faculty, chairman of each graduate school department committee, the Director of the Distant Education Division, the Librarian, the Director of the Student Affairs Division and two professorial representatives from each faculty.)

5.2.2 The Structure of the Distant Education Division

The structure of the Distant Education Division has to be dealt with in the Distant Education Division Academic Regulations.

(1) Staffing structure. The staffing structure of the Distant Education Division is that of till-time courses. However, lecture staff whose duties lie entirely within the realm of distant education may be appointed in each faculty.


Faculty A
Full-time course
Distant Course
Faculty Council
Distant Education Division
Faculty B
Full-time course
Distant course
Faculty Council
Academic Committee
University
Faculty C
Full-time course
Distant Course
Faculty Council
Study Guidance Office
Distant Student Division
Faculty D
Full-time Course
Faculty Council
General Affairs Division
Distant Education Secretariat
Accounting Division
Faculty E
Full-time Course
Faculty Council
Academic Affairs Division
Registry
Records Division
Personnel Division
Accounting Division
Academic Affairs Division
(Branch offices)
Faculty D Secretariat
Faculty E Office

(ii) The director. A director has to be posted to the Distant Education Division. He should be appointed by the President with the approval of the Academic Committee.

(iii) The Academic Committee. An Academic Committee has to be set up within the Distant Education Division. There shall be twenty seven members of the Committee, nine to be electe from among the permanent lecture staff by each Faculty Committee in Faculties, A,B, and C. The Director of the Distant Education Division convenes the Academic Committee and acts as chairman.

(iv) The Role of the Academic Committee.The Academic Committee deliberates important matters relating to the Distant Education Division and maintains contact with each faculty. However, in the matters noted below, deliberation by the Academic Committee may stand in lieu of deliberation by the Faculty Councils of Faculties A,B, and C. The results of this deliberation must, however, be reported promptly to the respective Faculty Councils.

- Matters concerning admission, expulsion and suspension of students, or withdrawal and leave of absence;
- Matters concerning the operation of distant lessons and schooling;
- Matters concerning all forms of examination;
- Matters concerning all official functions;
- Other matters concerning subjects specified by the Faculty Councils of each Faculty.

(v) Study Guidance Office. A few members of the Academic Committee are responsible for study guidance. The Study Guidance Office is provided for under the Distant Education Study Guidance Office Regulations. The Director of the Distant Education Division acts as Director of the Study Guidance Office while a Study Guidance Supervisor and an Assistant would hve to be appointed.

(vi) The Student Division. The Distant student Division is set up to cover extra-curricular activities of the students. The Director of the Distant Student Division is appointed from among the teaching staff by the President with the approval of the University Council.

(vii) The Secretariat. A Secretariat is organized in order to process matters pertaining to distant education under one roof. An extension of the University registry office secretariat, it is operated under the direction of a secreta and includes General affairs, Accounting and Academic Affairs Divisions.

3.3. Methods of Instruction

The term "Distant Education" can correctly refer both to a method of instruction and to an educational system. As we have stated before, we think that the use of printed materials combined with audio-materials is the most suitable for the African situation.

3.3.1. Correspondence Letters

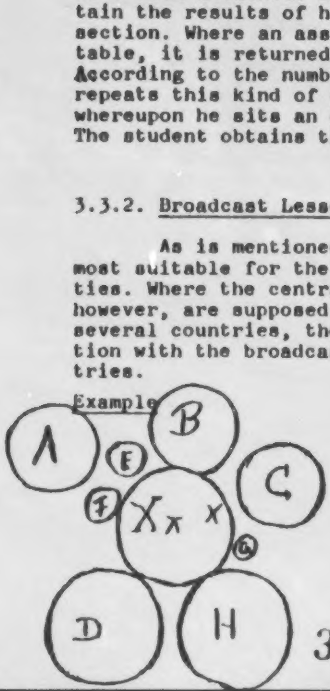
This form of instruction involves the production and distribution of printed studybooks (including instruction manuals) from which the student conducts his individual studies and, as he progresses, the presentation of assignment based on set problems and the grading and attaching of comments by the lecturer to these assignments. When questions arise part away through as to the meaning of the topics, the student can ask questions. This is done entirely by mail, and can be described as correspondence education in its origine form. This part relies entirely on the individual study.

In most cases studybooks are of a A 5 size (21o mm x 148 mm) and are of 75 to 1oo pages in length, corresponding to 15 hours lecture content - one credit in a full-time course lecture subject. As a rule one assignment could be accepted for each credit. The correction of assignments has to be performed by university lecturers and the assignments are returned to the student after comments and grades have been attached. By these means the student can ascertain the results of his study and proceed to the next section. Where an assignment has been marked as unacceptable, it is returned for rewriting and resubmission. According to the number of credits per subject the student repeats this kind of study until the subject is completed, whereupon he sits an examination under direct supervision. The student obtains the credits on passing the examination.

3.3.2. Broadcast Lessons

As is mentioned before audio instruction will be most suitable for the African Network of Distant Universities. Where the central university and broadcasting station however, are supposed to give service to a large area of several countries, there will be need for close collaboration with the broadcasting systems in the neighbouring countries.

Example



The University in country X is serving 9 countries in total. The radio station in X covers not only the entire country, but also the countries E and F. With the countries A,B,C and D an agreement has been reached so that the radio lessons are also broadcast in these countries. With the countries H and G no agreement could be reached. For country C an extra transmitter has been placed near the border so that the broadcastings of X also cover this neighbouring country. The area of H is too vast for the same solution. Therefore audio-cassettes have been prepared to be sent with the lessons to the students in H.

3.3.3. Residential Courses

The question remains if it is possible to complete a course at university level only by correspondence and broadcast lessons. Face-to-face sessions can be valuable and in a number of cases necessary. Holmberg warns against excessive use of face-to-face sessions, "as a teacher in class tends to take command and to double the teaching provided in the correspondence course. This usually both confuses and delays the serious distance students". Holmberg continues to state that "combinations of distance and oral tuition have proved to need complete integration based on systematic planning, allocating the two approaches to well defined tasks in the study process".(

"When the results of distance study are not satisfactory it is important to improve the distance teaching, not to supplement it with face-to-face teaching". (2)

May be that for the African Open Universities residential courses have to be primarily used in handling subjects where it is impossible to conduct lessons by correspondence or where an adequate learning effect cannot be obtained. Physical education, and experiments and practical work fall into theses categories. There are several patterns of how the schooling through residential courses can be carried out. For the African Network of Open Universities summer courses seem to be the most suitable solution. This is conducted as a full-time day course for a continuous period of three to six weeks.

3.3.4. Guidance

Guidance has to be conducted by the methods of correspondence and direct guidance. As is explained before, lecturer's comments attached to returned assignments are typical of the former and summer vacation courses are typical of the latter. It may also be possible that lecture staff visit the several countries to meet with groups of students in order to talk about general problems the students are facing. Various forms of direct guidance are possible, but it all depends on the situation in th religion. It is worthwhile to investigate the possibilities for regional organizations for direct guidance.

(1) Prof. B. Holmberg: Die Ergänzung des Fernstudiums durch
Nahstudium.
ZIFF-Papiere Nr. 15., Hagen-Fernuniversit

(2) Prof. B. Holmberg: Distance Education - A Concern of Developing Countries
Hagen 1978

David Sewart summarizes the essential elements of distant learning as follows:

"1. the instructional package of written and broadcast material;

2. the creative dialogue between tutor and student which is carried out by correspondence (and by telephone) and may be supplemented by face-to-face contacts;

3. the process of learning through discussion is fostered by the local tutor counsellor at foundation level in preparation for higher level studies where face-to-face tutorial is minimal or non-existant." (1)

The British Open University has some 26o study centres in the regions. Here the students can follow again the audio-visual materials, they can get advice and groups of students can come together. Although in the original planning the regional centres were regarded as a central element, still their success is a disputed point. It has been proved for example, that only 5o per cent of the study centres are used. Therefore, before starting with an expensive establishment of a system of study centres in Africa, a number of experiments are needed.

3.3.5. Evaluation of Students' Work

The results of studies are to be evaluated by the examinations for credit in each subject. In order to ensure absolute fairness, the students have to be gathered in one place and the examination has to be conducted under supervision. Theses examinations are conducted at frequent intervals according to a yearly timetable in centres in the several countries. The student needs to get an opportunity to sit examinations at least almost every 3 months. For this reasons, he can sit examinations at any time in subjects for which he has completed studies. Where the student fails an examination, provision has to be made for him to re-sit the examinations until he passes.
In a number of subjects it may be needed requiring the student to pass final examination with a dissertation and oral examination.

3.4. Curricula

The curricula for distant education have to be prescribed in the Distant Education Division Academic Regulations. In principle, distant courses curricula are thought of as being the same as those for full-time courses, but in fact distant course curricula are organized to make the most of the social features of distant education. It is not necessary to add that the curricula are based on the provisions of the University Establishment Standards and the University Distant Educations Standards.

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(1) David Sewart: Introductory lecture on the Symposium about "The Student in Distant Study Systems" Strasbourg 1975

3.4.1. Subjects

Subjects are as for full-time courses and are grouped into several faculties, such as general education, foreign languages, health and physical education and major subjects. General education subjects can be offered in fields covering the humanities, social sciences and natural sciences. Health and physical education subjects can be offered as practical and lecture subjects.

3.4.2. Credits

The number of credits for each subject has to be prescribed by the Academic Regulations, but expressed in terms of the textbooks, one credit can be calculated as being equivalent to a number of pages (e.g. 75 to 1oo A 5 sized pages).

3.4.3. Conditions for graduation

These are almost identical to those for full-time courses, and can be prescribed as follows

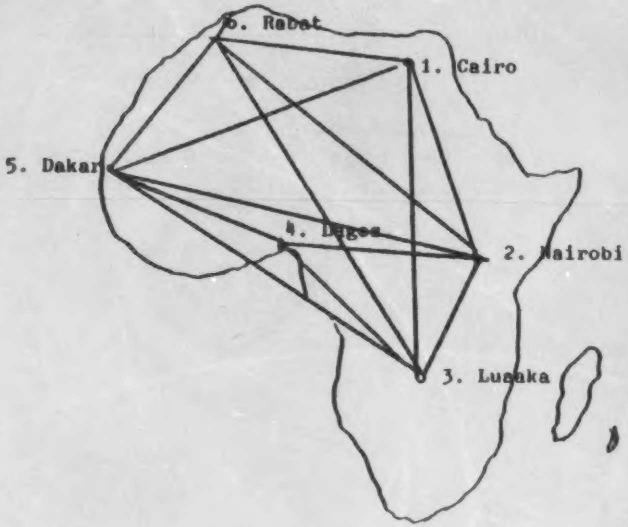
Minimum years of attendance	four years more
General education subjects	36 credits more
Foreign language	8 credits more
Health and physical education	4 credits (2 credits must be for practical work
Major subjects	76 credits or more
(TOTAL)	3o credits or more
Schooling credits included in above	3o credits or more

3.4.4. Teachers' Training Course

All universities of the Network have to offer parallel training courses for teachers. It is a feature of the teacher training courses that they provide an opportunity for a wide choice of courses of instruction, not only to obtain initial certificates, but also advanced certificates.

4. OBJECTIVES OF THE PROJECT

4.1. Choice of Participating Universities



In the choice of participating universities we have considered the following criteria:

(i) geographical coverage
(ii) population coverage
(iii) the capacity of the university
(iv) languages

We left out the criterium "politics", because we have the impression that even if countries differ in political views, that there is most of the time the opportunity to collaborate in the educational field. However, it would be necessary to give due regard to the readiness of individual countries to participate in the network.

On the basis of the above mentioned criteria we have made a preliminary choice of six universities (see map).

A university in:	course languages:
1. Cairo	English/Arabic
2. Nairobi	English
3. Lusaka	English
4. Lagos	English
5. Dakar	French
6. Rabat	French/Arabic

4.2. Coverage

The selected universities are supposed to cover all African countries as follows:

No.	University	Countries covered	Population in millions
I	Cairo	Egypt	34
		Libya	2
		Sudan	17
		Chad	4
		Djibouti	0,5
	TOTAL	5 countries	57,5
II	Nairobi	Kenya	11
		Tanzania	14
		Uganda	1o
		Somalia	3
		Ethiopia	3o
		Sechelles	--
		Comoro Islands	0,5
	TOTAL	7 countries	68,5

No	University	Countries covered	Population in millions
III	Lusaka	Zambia	5
		Botswana	1
		Lesotho	1
		Swaziland	0,5
		Angola	6
		Malawi	4,5
		Mozambique	9
		Malagasy	8
		Mauritius	1
		Reunion	0,5
		Burundi	4
		Rwanda	4
		Zaire	22,5
	TOTAL	13 countries	67
IV	Lagos	Nigeria	56
		Cameroon	6
		Benin	3
		Centr. Afr. Empire	2
		Equat. Guinea	0,5
		Congo	1
		Gabon	1
	TOTAL	7 countries	69,5
V	Dakar	Senegal	4
		Gambia	0,5
		Guinee Bissau	0,5
		Guinea	6
		Sierra Leone	3
		Liberia	2
		Ivory Coast	5
		Upper Volta	6
		Ghana	9
		Togo	2
		Mali	5,5
	TOTAL	11 countries	43,5

No.	University	Countries covered	Population in millions
VI	Rabat	Morocco	16
		Algeria	14
		Arab. Rep. of Sahara	3
		Mauretania	1,5
		Tunesia	5,5
		Niger	5
	TOTAL	6 countries	45

4.3. Choice of Subjects

An evaluation has to be made as to which subjects are most needed for the development of the African countries. There is also the need to look for practical possibilities to teach those subjects by distant education methods. Suggestive subjects may be in the following categories:

a. Health

- (i) Child study
- (ii) Food and nutrition
- (iii) Housing and clothing
- (iv) Nursing
- (v) Health Education
- (vi) Modern medicine
- (vii) African traditional medicines

b. Education

- (i) Curriculum design and development
- (ii) Psychology of Learning and Teaching
- (iii) The School in the African Society
- (iv) Management in Education
- (v) Language and Learning
- (vi) Teachers' Certificate Primary Education
- (vii) Personality and Learning

c. Social Sciences

- (i) Introduction to Sociology
- (ii) Micro Economics
- (iii) Public Administration
- (iv) Regional studies and development
- (v) Introduction to Political Science
- (vi) Accounting
- (vii) National development and economic co-operation

d. Mathematics

(i) Introduction to mathematics
(ii) Linear mathematics
(iii) Analysis
(iv) Complex analysis
(v) Mathematics and computers
(vi) Differential geometry
(vii) Numerical computation

e. Science

(i) Physiology
(ii) Geology
(iii) Biochemistry
(iv) Geochemistry
(v) Ecology
(vi) Nature of chemistry
(vii) Genetics

f. Technology

(i) Engineering mechanics
(ii) Systems management
(iii) Environmental control
(iv) Telecommunication systems
(v) Instrumentation
(vi) Human factors and systems failure
(vii) The digital computer

g. Mathematics/Science

(i) Statistics

h. Agricultures

(i) Forestry
(ii) Agriculture economics
(iii) Animal science
(iv) Home economics
(v) Agricultural engineering
(vi) Management of Farm Supply and Marketing Firms
(vii) Rural Sociology

Many more categories can come up in the future, such as History, Psychology, Philosophy etc. But first the group of experts participating in the International Seminar on Distant Education in Addis Ababa has to decide upon priorities. Next to this day they also have to decide upon whether the selected courses have to be completely developed by African experts or that overseas courses may be adapted and translated.

4.4. The Project: African Network of Open Universities

4.4.1. Strategy in general

The general strategy is based on the principle of the "snowball effect" and can be executed in accordance with the following scheme:

				Time in months
Phase I		1. Cairo		12
Phase II	2. Nairobi		3. Lusaka	9
Phase III	4. Lagos	5. Dakar	6. Rabat	6

TOTAL 27 months

4.4.2. Number of Man/Months needed

Development in	experts needed	man/months
Cairo	1 overseas DE specialist parttime OU assistance Training of Egyptian experts	12
Nairobi/Lusaka	1 overseas DE specialist	9
	3 Egyptian specialists Training of Kenyan/ Zambian experts	27
Lagos/Dakar/Rabat	1 overseas DE specialist	6
	2 Kenyan specialists	12
	2 Zambian specialists	12
	1 Egyptian specialist	6

TOTAL 84 man/months

4.5. Consortium of Overseas Open Universities

It is planned that a group of Open Universities in Western Europe will supply the scientific support to the African Network of Open Universities. The following universities will be requested to support the African Project:

(i) The British Open University;
(ii) The Open University of The Netherlands;
(iii) The Distant University of West Germany;
(iv) A Distant Education University in France;

5. TYPE OF BILATERAL ASSISTANCE REQUIRED

The project will need:

(i) one overseas expert in distant education on university level;
(ii) funds to support African experts;
(iii) funds for administrative support and travel costs;
(iv) short-term consultants

6. DUTIES TO BE UNDERTAKEN

(i) Establishment of extension services at the above named African universities;
(ii) Establishing links with other African universities and educational institutions in the region;
(iii) Development of course materials with the assistance of the European Consortium of Open Universities and with local experts;
(iv) Training of the local D.E. staff;
(v) Research on the use of mass-communication media in Distant Education;

7. DATE OF COMMENCEMENT AND DURATION

The date of commencement is January 198o and will be operated for three years.

8. DUTY STATIONS

The places in which the work on the project is to be undertaken are:

(i) Cairo
(ii) Nairobi
(iii) Lusaka
(iv) Lagos
(v) Dakar
(vi) Rabat

9. SUPPORT TO BE PROVIDED BY ECA

ECA will administer the project, give technical advice and provide professional and administrative backstopping to the team. The organization will do everything possible to facilitate the field work and will arrange project meetings as appropriate.

10. ESTIMATED COSTS

The estimated cost of the project and technical assistance required from cooperating governments and organizations is U.S. $ 477,922 for 198o - 1982 with cost breakdown in the following schedule:

Project Personnel	M/M	Total $	M/M	198o $	M/M	1981 $	M/M	1982 $
Overseas Expert in Distant Education (P5)	27	16o,23o	12	75,92o	12	61,18o	3	23,13o
3 African experts (P 3) Nairobi/Lusaka for 9 months	27	54,000			27	54,000		
5 African experts (P3) Lagos/Dakar/Rabat for 6 mths.	3o	6o,000			15	3o,000	15	3o,000
	84	274,23o	12	75,92o	54	145,18o	18	53,13o
Administrative and secretarial support		45,000		15,000		15,000		15,000
Travel costs		4o,000		5,000		14,000		21,000
Short-term consultants (European Consortium)		6o,000		25,000		2o,000		15,000
Sub-total		419,23o		12o,92o		194,18o		1o4,13o
Overhead costs 14%		58,692		16,929		27,185		14,578
Grand-total		477,922		137,849		221,365		118,7o8

4.3.3. Composure of the Committee

DISCUSSION COMMITTEE No. III

1. THE ROLE OF THE UNIVERSITY IN DISTANT EDUCATION
2. AFRICAN NETWORK OF OPEN UNIVERSITIES

1. Prof. B. Singh - India
2. Dr. W.A. Jayawardana - Sri Lanka
3. Prof. Crocombr - Fiji (University of South Pacific)
4. Dr. M.F. Omran - Egypt
5. Mr. Moshabesha - Lesotho
6. Dr. I.A.J. Nankwenya - Malawi
7. Dr. J.A. Akinpely - Nigeria
8. Dr. P.A. Mwaipaya - Zambia
9. Dr. S.P. Ndlovu - Zambia
10. Mr. Yu Wuchen - Peoples' Republic of China
11. Mr. G. Rumble - United Kingdom
12. Prof. B. Holmberg - Sweden/Germany (Fernuniversität)
13. Ato Abebe Berhanu - Ethiopia
14. Ato Girga Gabre - Ethiopia
15. Dr. E. Godfredeen - U.S.A.
16. Dr. J.R. Hakemulder - Secretariat
17. Dr. Oguntonade - Nigeria
18. Mr. Seal - ILO
19. Ato Lakew Mulat - Ethiopia
20. Dr. J. Heising - Federal Republic of Germany (DSE)

4.3.4. Final Report

A. General Remarks

The first report identified the fact that most African nations are confronted with an acute problem concerning compulsery mass education; that in order to facilitate rapid and smooth development African nations have and indeed must imbark upon the implementation of more realistic and more effective mass educational programmes of formal and non formal nature; and that since educational training very often meets the basic needs of a nation and also facilitates its rapid economic and material development, then the next task of Committee Number Three should be to carefully examine ECY's suggestion concerning the possibility of establishing a network or an umbrella under which all existing African institutions on distance education and those in the offing could operate. Accordingly,the Committee devoted its time in the second part of its deliberations on the scrutiny of the structure, objectives and programme of action of such an educational network.

B. The Establishment of a Network of African Institutions on Distance Education

With the idea of trying to determine the possibility of establishing an effective and realistic network of African institutions on distance education in mind, the committee first and foremost paid special attention to the nature, functions structure and objectives of such network. This means that the Committee considered and discussed at length the functions and objectives of the proposed network, so as to identify the areas and order of priority of its functions and objectives. This undertaking was deemed to be of utmost importance, particularly in view of the short-term and long-term objectives, that is, in view of which of the objectives could be achieved in the shortest possible time and which required long range planning

From all this, it ought to be clear that the Committe Number Three agreed with ECA's proposal that a network of African Institutions on distance education should indeed be established and that, however, in doing so its functions and objectives should be identified in terms of order of priority.

The justification for the establishment of a network of African institutions on distance edcuation consists in the fact that existing distance education institutions all over Africa need some co-ordination, especially where the better use of their available expertise is concerned; and that such network could facilitate the exchange of staff and expertise and eventually make it possible for existing institutions and those in the offing to work together very closely for mutual benefit. Also bearing in mind that Africa faces an acute shortage of manpower in the field of distance education and the importance of sharing expertise, tasks, tools, experiences or ideas, it would seem that the establishment of an African network on distance education is really a necessity.

Apart from supporting the ECA's proposal about the establishment of a network at African institutions on distance education, the Committee is of the opinion that the name for such network should be able to incorporate conventional and non-conventional educational systems. The Committee also proposes that since a similar body (the Association of African Correspondence Education) already exists it must be evident that the AACE working in close collaboration with ECA should lokk after the programme of development of distance education; and that for it to operate effectively it should and indeed must appoint a full-time consultant, equipped with a secretarial staff to make his task relatively easy.

Above all, the Committe also recommends that the Association of African Correspondence Education (AACE) should be programme-oriented or action-oriented, and that it should take this recommendation seriously and try to make it a reality that is, it should find ways and means of implementing it and thus avoid its past pitfalls.

C. Objectives of the Governing Council on Distance Education for Africa

In view of the fact that the Association of African Correspondence Education should be action-oriented, the Committee then identified the following objectives in terms of priority: (a) Immediate Priorities, and (b) Future Priorities.

(a) Immediate Priorities:

1) To promote co-operation in educational activities among distance education institutions. This means that the AACE should facilitate:
   - (i) the identification of areas of common and differing programmes;
   - (ii) examine such programmes in terms of strategies and content;
   - (iii) inform all institutions about one another's programmes;
   - (iv) suggest improved means of carrying out programmes; and
   - (v) examine the relevance of programmes to various societies and also advise institutions as to how they can bring about improvement to their programmes, properly plan and develop them.

In accordance with this objective, the Committee recommends that the AACE should encourage and advise bodies on how new distance education institutions can be best established; that it should promote the exchange and secondment of staff; examine possibilities of common radio programmes, common syllabi and common lecture material etc; advise institutions on how to maintain high academic standards; prepare, update and distribute a directory of distance education institutions.

2) To publish newsletters, which should contain:
   - (i) information about programmes of various distance education institutions;
   - (ii) information on research programmes;
   - (iii) bibliography on distance education;
   - (iv) news about international distance education development;
   - (v) be means on exchanging information on distance education among distant educators;and
   - (vi) carry announcements about seminars, workshops and conferences.

3) To act as a centre of contact among African institutions.

4) To act as a centre for matters concerning staff training and development; that is, the AACE should:

   (i) act as a centre for identifying locations of experts and persuading them to organize training;

   (ii) map out areas of experts necessary for distance educators;

   (iii) identify institutional manpower needs, and advise and sponsor training (when necessary)

   (iv) organize workshops for distance educators on various subject areas at different levels; and

   (v) organize seminars and workshops for distance education administrative staff.

5) To establish a clearing house, which will and should:

   (i) facilitate the collection of information from various sources on distance education;

   (ii) compile bibliography according to subject-matter on distance education;

   (iii) provide photocopying and micorfilm services; and

   (v) edit material for distribution.

   Such clearing house should have to be manned by the Association's consultant, working in close collaboration with ECA.

6) To act as a media for contacts between African distance education institutions and non-African bodies, that is: (a) facilitate contacts between non-African and African distance education institutions, such as ICCE, Commonwealth Secretariat etc; and (b) facilitate contacts between African and non-African funding agencies, such as DANIDA, CIDA,SIDA, DSE. DVV. USAID, NORAD, Ford Foundation etc.

(b) Future Priorities:

(i) to sponsor the exchange of personnel among distance educatio institutions;

(ii) to undertake staff training and development;

(iii) to channel aid and technical assistance;

(iv) to publish a journal and newsletters and other relevant material;

(v) to undertake curriculum development and institutional designs

(vi) to co-ordinate research and evaluation activities.

D. Service of the ECA Consultant

In order to ensure the implementation of these and other recommendations advanced by this Seminar, Committee Number Three proposes and indeed implores AACE and ECA that until a consultant has been identified, properly initiated in the ECA's cumbersone activities on distance education and has eventually established credibility, the current ECA consultant should be retained, and if this is not possible then he should at least be allowed to be linked with his current place of work and present activities. That is, realizing that Dr. J. Hakemulder will soon be leaving ECA without a replacement, the Committee wishes to request not only AACE and ECA but funding agencies as well through their representatives, to try to retain Dr. Hakemulder until an adequately qualified replacement has been identified and has indeed worked with him very closely. This is of utmost importance, if continuity, smooth operation of the Association and the proper and rapid implementation of these proposals and recommendations will ever be executed.

4.4. Sub-Committee IV: On Exchange of Distance Education Materials

The need for a special committee which should survey the topic of Exchange of Materials was felt during the conference.

4.4.1. Composure of the Committee

Members:	Dr. P.O. Kulshreathh	- Sri Lanka
	Prof. B. Singh	- India
	Mr. Hafiz Wali	- Nigeria
	Mr. Robin Twite	- United Kingdom

4.4.2. Final Report

The Sub-Committee considered the question of sharing of materials and came to the following conclusions:

a) It is impracticable at the present time to create a Central Institution in Africa which would collect actual course materials. No funds exist and extensive storage space would be needed.

b) Similar objectives apply to setting up of an institution outside Africa.

The Sub-Committee considers that there is, however, a place for a central point to which information about courses (rather than course materials itselves) should be sent and then distributed (either on request or on regular basis) to institutions, both in Africa and elsewhere. They suggest that:
African and other Institutions should send details of courses and audio-visual material to either:

a) African Association for Correspondence Education (assuming this organization has a small secretariate).

b) Commonwealth Secretariate (to whom the ECA should make an approach).

c) International Bureau of Education, Geneva (to whom the ECA should make an approach).

The most appropriate of these organizations could then circulate lists and basic details to all interested institutions.

Institutions finding an interest in any particular written course or audio-visual materials should write directly to the Institution producing these materials for actual copies of written units, films etc.. Exchange of materials should be bi-lateral (not through a central point) and at the cost of the Institution concerned.

4.4.3. Related Conference Document

BASIC EDUCATION AND TEACHER SUPPORT
IN SPARSELY-POPULATED AREAS (SPA)

SCHOOLING WITH TELEVISION IN RURAL AREAS:
THE CASE OF PORTUGAL'S TELESCOLA

(Note by the secretariat)

1. The attached paper, prepared by Mr. L.C. Taylor, is one of a series of contributions to the CERI project on "Basic Education and Teacher Support in Sparsely-Populated Areas (SPA)". This text is a preliminary version which is subject to further revision. It will be made available to participants at the Aurillac Conference (3rd - 6th December 1978) for INFORMATION and COMMENTS.
2. The views expressed are those of the authors and do not commit either the Organization or the national authorities concerned.

SCHOOLING WITH TELEVISION IN RURAL AREAS: THE CASE OF PORTUGAL'S TELESCOLA

Introduction

'Telescola' is a system which provides televised lessons, beamed to 'reception posts' where 'monitors' first receive and then 'exploit' the broadcasts with their classes. This 'exploitation' is based on teachers' guides and pupil texts, specifically prepared for the purpose. The integrated broadcast/print/monitor system of Telescola covers the two years of the 'preparatory' cycle of schooling. These two years, added to the four years of the primary cycle, comprise the span of basic education in Portugal. At present, thirteen years after its foundation, Telescola delivers post-primary schooling, in all subjects in the official curriculum except physical education, to 50.000 children principally in rural areas.

For so large, long lived and rare an example of the use of the newer technologies in education Telescola is surprisingly little known. The standard work on "New Educational Media in Action", exhaustively compiled in 1967 under UNESCO/IIEP sponsorship, listed all the major instructional broadcasting systems around the globe, including many whose hopes of permanence seemed (and have proved) slight indeed, yet nowhere mentioned Telescola. Nor is more than a passing mention to be found in other publications.

What accounts for this strange neglect? Politics, in part: in the days of Salazar and Caetano, Portugal was outcast from many international Organizations, its achievement less noticed than its shortcomings. Misunderstanding has contributed: western educationalists have ample experience of television in schools; and, especially at post-primary levels, know it to be peripheral. Telescola is easily mistaken, at first hearing for 'educational television', that familiar expedient for adding sauce to enrich from time to time the solid but often unpalatable ingredients of learning;

or as 'supplementary instructional television' used occasionally to deal with particular tonics. It is altogether unexpected that out of Portugal should have emerged the only well-established example in Europe of an integrated learning system, in which television plays a central instructional role , covering the full curriculum at 'first-cycle secondary' level and dealing with tens of thousands of children.

Development of Telescola

By the 1960s in Portugal the four grades of primary education had become compulsory and 'universal' (i.e. extending to more than 95 per cent of the population). Meanwhile post-primary education slowly spread in the countryside usually by tacking two additional grades of schooling onto existing primary schools. The difference in academic quality between grades 5 and 6 in specialized town schools, and the same grades in rural primary schools was marked and unsatisfactory.

Faced with this inequality, the Ministry of Education authorized its newly formed 'Institute for the Technology of Education' to create broadcasts for grades 5 and 6. Such broadcasts, prepared and delivered by specialists, linked to specially-prepared texts for children, and including suggestions for follow-up activities by teacher - 'monitors', were intended to ease the new burdens placed on rural primary schools.

When broadcast commenced in 1965, Telescola's 'Unified Course' (combining the fifth and sixth grade curriculum) was something of a leap into the dark. No one could tell whether television-based schooling, as planned for Portugal, would prove viable, either pedagogically or technically. Such a radical innovation could be licensed initially by the Ministry only as 'experimental' - a fact which explains why the original recipients were located solely in 'private'reception posts. Later the system, and most posts, became"official" as Telescola proved its effectiveness.

In 1968 the Government re-arranged the structure of schooling establishing a 'Preparatory Cycle' between the primary and secondary cycles. Grades 5 and 6 were to become compulsory and Telescola became a re-organized part of the provision of compulsory schooling. Its 'Unified Course' was re-named 'Ciclo-Preparatorio TV' and its subsequent growth after a pause for re-adjustment, was rapid.

The policy of introducing a compulsory and uniform "preparatory cycle" (i.e. grades 5 and 6) into the Portuguese educational system was consistent with the long-standing trend toward the 'unification' of schooling in Portugal. Both through the construction of new facilities for preparatory schooling in urban areas and through the introduction of Telescola in the remoter regions, the Portuguese Government hoped to come closer to a realization of the principle of equal educational opportunities for all children. The clear intent was to use a unified preparatory curricula as a means of eliminating the perceived town/country disparities in the old "complementary cycle" system. Table 1 reveals the extent to which this goal has been achieved

Table 1: Growth of Preparatory Cycle Schooling in Portugal 1972 - 1977

Type of schooling	Number of pupils (1972 -73)	Number of pupil (1976-77)
Preparatory Cycle in "normal" classrooms	144 142	231 443
Preparatory Cycle via Telescola	21 757	50 500
Complementary Cycle (all forms)	47 930	10 782

The 1980s are likely to be the era in which the complementary cycle is eliminated altogether from Portuguese education. Coupled with this outcome will be a continuing expansion of preparatory cycle schooling (including both the "normal" and Telescola variety) as more out of school populations are brought back into the educational system.

HOW TELESCOLA WORKS

For the most part, Telescola viewing groups were, and are, located in rural primary schools and consist of rural school children. There are, however, exceptions to this expected pattern which warrant special mention. For example, in the early years of Telescola, adults comprised about 10 per cent of the consistency for fifth and sixth grade broad casts. Further, school classrooms (even loosely defined) were not the exclusive location of Telescola viewing groups. Other sides employed include ships, factories and prisons. Yet, the proportion of adults served by Telescola has declined over the years - the result of both lowered demand among adults and heightened demand from children (the priority population).

Given Telescola's status as a rather unusual and successful delivery system for rural education, it is important to understand the precise ways in which it was organized and operated. To this end, the receiving end of the system will be discussed first, followed by a discription of the arrangements pertraining to the creation, control and support of Telescola's services.

Setting up a Reception Post

Various 'collectivities' (normally a village) and certain individuals can apply for a licenee, annually renewed, to establish a reception post. A book of "Regulations' issued by the Portuguese government lays down certain specific requirements which all reception posts must meet. Chief among them are the following:

(a) Minimal mumber - There should (theoretically) be a minimum of 7 pupils in each grade, i.e., a total not less than 14. However, smaller posts are certainly not unknown;

(b) Space - There had to be a minimum of 2 classrooms each able to seat 2o or more pupils, plus cloakrooms and other necessary facilities,

(c) Equipment - The requirements here include desks, blackboard, cupboard, workbench and tools; science demonstration materials and a television set with a 49 cm screen. (Posts having no access to electricity were provided with a Honda generator);

(d) Supervision - At least one suitable qualified Monitor must be appointed per class. One of these acts as "Manager";

(e) Administration - The Regulations detail procedures for matriculation, daily registration, graduation, reporting to the central authority, and operating the state system of subsidies for poorer pupils; and

(f) Pedagogical requirements - For example it was required that broadcasts must be viewed on a regular basis, all required test and exams must be taken and pupils graded, and specified training courses for Monitors must be attended.

Private and Official Posts

'Private' post were (and are) those set up and managed outside the public educational system. While Telescola met the costs of producing and transmitting the programmes and of supervising and controlling the system as a whole, the local Manager was responsible for reception costs. To meet such costs, pupils in a private post could be charged a monthly fee for attendance, the maximum being fixed by the Ministry. It was often the case that a post, although private, was housed in the local primary school; in that event, the Manager was required to reserve 25 per cent of places, free of charge, for the poorer local children. Subsidies were available to assist needy families with fees or other educational charges.

From 1970 the Ministry started converting those reception posts used primarily for school children into 'official' posts, sometimes subsidizing the remaining private posts where the number of children was uneconomically small. By 1975-1976 only 35 private posts remained. Except for adult'collectives', the last is likely to disappear before long.

Access and Attendance

The normal rules governing attendance at school apply officially also to Telescola: that is, attendance is compulsory up to the age of 14. In practice, in country districts, compulsory attendance beyond the primary stage is enforced with descretion and not at all if a pupil has a journey to a Telescola post of more than 3 kilometres each way. Voluntary attendance, of course, extends much further. At the extreme one hears about determined individuals who walk 12 kilometres daily to a post and of a small group arriving from an outlying village with an adult escort because the snow had made wolves a hazard. Attendance at post is normally, of course, less dramatic, sometimes involving no more adventure than the dodging of traffic on the roads. Special school bus routes for Telescola students can be established, but, in practice few such routes exist.

Actual attendance is extraordinarily regular at Telescola posts. Education beyond the primary stage in the rural areas of Portugal is still considered to be something of an exception and a privilege. In addition, pupils in village posts lack the cover of anonymity which, in the larger urban schools, often allows a student's absence to pass unchallenged, and even unnoticed.

Telescola lessons continue with unremitting regularity. For example, in 1975, during the worst confusions of the revolutionary period, the Preparatory schools started the school year several weeks late and suffered numerous disruptions. In contrast, Telescola kept its precise, unbroken schedule. The main hazard to attendance is the agricultural cycle: a Telescola Assistant (i.e. Inspector) cited the case of one of his posts in which during the olive harvest the normal number of 17 pupils dwindled to 4. With a proper sense of priorities (and of reality) he had decided to take no action.

Broadcast Content and Format

For Telescola students, school is in session Monday through Friday afternoons for approximately five hours a day. Generally, the format is to have a twenty minute broadcast immediately followed by a thirty minute period of "exploitation" led by the monitor. On Wednesday afternoons, there are special broadcasts (e.g. sports, cultural events and documentaries) followed by a time reserved for local field trips, project activities or other more creative exercises.

The essential style of Telescola broadcast lessons is that of a presentation by a single teacher - i.e., for the most part, Telescola employs 'talking face'. Although liberal use may be made of illustrative material, acted inserts etc., the TV-teacher aims to establish an atmosphere analogous to that of a classroom, frequently addressing the class directly. He poses direct questions - in which case, if the classroom 'Monitor' points to a particular child in the class, he or she answers; if not, the whole class does so. Some TV-teachers seem particularly successful at establishing a 'rapport' with pupils across the air.

After each broadcast, the monitor begins the period of 'exploitation'. Armed with the suggestions contained in the notes for each lesson in the monitors'"Bulletin of Orientation", he asks questions designed to emphasize essential points in the lesson. The pupils then apply what they have learned by completing the exercises set out in their work sheets. Lessons are meant to be completed within the framework of the timetable. Homework is exceptional. The suggestions made in the monitors' Bulletin exclude homework of a bookish sort, confining it to some practical or creative exercises, such as planting and observing seed, or measuring the milk produced by a cow or a goat.

The Role of the Monitors and Assistants

Frequentely one hears the authorities responsible for Telescola insist that it is a system of teaching *with* television, not *by* television. By this,they assert especially the importance of the monitor. Such an assertion is in some part political. Teachers in Portugal, as elsewhere, view television as a doubtful ally.

The monitor's place in the teaching sequence contains some ambiguities, largely revolving around the degree of freedom they have, in the "exploitation" phase of schooling. However, his dominance is undoubted in that part of the learning process which depends upon a good working relationship between teacher and pupil. Because the monitor needs to expend less time and energy than does the classroom teacher into preparing formal lessons there is an enhanced capacity to devote close attention to the needs of individual children. Further, while "normal" preparatory level teachers are specialists assigned to teach five or six different classes of children each day, monitors teach one or two classes only. Telescola monitors get to know each child in a number of different contexts and, as a consequence, the monitor-pupil relationship tends to be closer than that found in "regular" preparatory schools.

Care was taken in 1965, when Telescola began, to establish effective local supervision of the reception posts. The officials appointed were called 'teacher-assistants' ('assistants' for short). The word 'inspector' was deliberately avoided. The name implied a less authoritarian relationship between a supervisory official and a teacher than the one conjured up by 'inspector'.

In practice, the Telescola assistants combine many of the functions normally associated with three different types of educators: inspectors, advisors, and field-based administrators. Thus, one finds assistants regularly performing such duties as the planning and creation of new Telescola posts; site evaluation and monitoring (a minimum of six visits per year are made to each post); co-ordination and distribution of needed equipment, materials and supplies; advising teachers on curricular and other pedagogical issues; administration of government susidies and other financial matters; administrations of student examinations; and arbitration of local Telescola-related disputes.

Clearly, the role of the assistant, while personally demanding, is vital to the successful functioning of the Telescola system. Although the relationship between assistants and monitors cannot precisely be called "collegial", it is common for a genuine rapport to exist here. The strength of this relationship is remarkable in view of the fact that assistants each have 25 to 4o posts for which they are directly responsible. In 1974-75, for instance, there were 35 assistants serving 916 Telescola posts.

Pupil Assessment

From the start of Telescola, a determined effort was directed towards establishing a standard throughout the system, such that the progress of pupils in the scattered reception posts could be checked against it, and so that the general public would know that any final certificate Telescola might award had more than merely local standing.

The instrument for this progress of validation was a battery of tests which had achieved, by 1974, considerable complexity and finesse. With 'liberation' in April of that year, examinations throughout the educational system either disappeared or took on strange forms, local and democratic, which required in those who took notice of the results a certain willing suspension of disbelief. The first Constitutional Government, elected in July 1976, restored much of the traditional rigour of examinations, but the elaborate assessment mechanisms developed before the revolution, and subsequently disrupted, could not be suddenly revived. The description that follows of the examination arrangements is consequently not actual in every detail; it presupposes that certain elements of the normal 'historical' system will in time be re-constituted.

The main testing instruments are:

(a) 'Objective tests' - Examinations are held three times a year utilizing primarily multiple choice questions. These examinations are developed, corrected and evaluated at Telescola headquarters.

(b) 'Complementary tests' - Designed to accompany the 'Objective tests' and provide opportunities for more "open-ended" questioning, these examinations are developed by Telescola but graded by the local monitors according to marking instructions supplied

(c) Monitors' grades - In addition to the tests, monitors give each pupil a grade reflecting their general view of the pupil's accomplishments through the use of a 2o-point scale. In certain subjects, such as Art, the monitor's grade is the only form of pupil assessment.

(d) Oral tests - In both Portuguese and French, pupils are required to respond to questions on tape once a year. These oral examinations are generally administered by the assistants.

(e) Concluding examination - At the end of grade 6, pupils take a special final examination. This test utilizes both multiple-choice and open-ended questions but is significantly more extensive and exacting than earlier tests. Accordingly, the results of this exam are the primary determinant of whether a pupil will receive his or her Telescola "diploma".

These tests were (and are) the basis of grade 5 promotion and grade 6 certification. The 'failure' or 'repetition' rate in Telescola in 1974-75 was about 7 per cent at both levels. In "normal" preparatory cycle schools dúring the same years there was a 15 per cent repetition rate at grade 5 and nearly 2o per cent at grade 6. Critics of Telescola argued that its tests were too 'easy'. They claimed that the style of examining (in which multiple-choice testing played a leading role) emphasized the simplest kind of question and answer, and was better suited to knowledge of fact than to the application of thought. In practice, the low repetition rate reflected deliberate policy, in that the authorities judged that a repeated year in the circumstances of Telescola caused considerable practical problems and was seldom profitable. They adjusted the exam 'pass level' accordingly, reducing repetition to the minimum compatible with contemporary teacher and parent expectations, and with the maintenance of a sense of achievement among the successful pupils.

Telescola's centrally-controlled testing differed sharply from the practices of the normal school system in terms of both its frequency and its "objectivity". In regular Portuguese schools, the award of a grade to each pupil was the only form of public testing before the final exam. It reflected a total impression, rather than scores on specific tests, and was fixed entirely at the discretion of each individual teacher. In Telescola, regular testing was part of an apparatus of close control which characterized the original system and which persists, even if in an attenuated form.

Transmitting the Broadcasts

We do not propose here to detail the 'house-keeping' aspects of Telescola - the records kept for each post and each pupil; the controlled dispensing of thousands of small itmes of expenditure; the miscellany of elements, each with its proper timing, which make up the complex flow-chart of annual operations. Such minutiae make unilluminating reading and do not interest policy makers or educationalists.

However, we need to remember that the whole pedagogic enterprise of Telescola depends upon the faithful and exact execution of such routine, designed with unusual foresight at the very start of Telescola in 1965. This level of administration survived the trauma of revolution remarkably well; the 'organs' of Telescola still continued their automatic functioning even after its 'head' (in the form of the central Telscola staff) had been cut off. By 1977, however, sometimes the non-arrival of print materials and supplies, and the like. At the point when things started going wrong, the importance of 'routine' house-keeping in Telescola was finally properly appreciated.

'House-keeping' takes on added complications for Telescola on "the Islands" - the Azores, Madeira, and Tome. Their distance from the mainland means that transmission must be local and thei generally mountainous configuration means that transmission cannot always be 'open' and direct. On Tome, cable trammission is widely used by Telescola; on volcanic Madeira and some of the Azores, video-cassettes. The Madeira installation is claimed to be the world's largest video-cassette operation in regular educational use. The broadcasts on original matrices are flown weekly from the mainland and are there transferred onto video-cassettes - an operation requiring considerable care and checking to ensure consistent, good quality registration. A regular 'milk run' ensures that old cassettes are collected, new cassettes delivered, at every listening post on the island twice a week.

The Institute for the Technology of Education

ITE's supervisory functions over Telescola include the following

(a) General policy control - ITE lays down the framework within which the Director of Telescola and his staff work.

(b) Budgetary control - Although Telescola itself necessarily keeps detailed records of expenditure, over all financial control, budgeting and accounting are the responsibility of ITE (in consultation, of course, with Telescola's Director).

(c) Appointment of staff - Telescola's principle administrative staff members (e.g. the Director) are appointed by ITE. So are the TV-teachers and the assistants - normally by open competitive examination. Managers of posts and monitors are licensed by ITE, after due checking by the local assistant.

(d) Establishment of posts - The setting up and closing of reception posts is decided by ITE, acting with the advice of the local assistants, and in consultation with the 'school-mapping' section at the Ministry Planning Bureau.

(e) Equipment - The supply of technical equipment at reception posts is managed by ITE.

(f) Pupil-subsidies - The various subsidies (general educational subsidy, books, transport) available to Portuguese families fro the government's budget are decided and administered, in the case of pupils at Telescola reception posts, by ITE (acting on the local advice of managers and assistants).

Cost Data

Costing is necessarily retrospective. The most recent school year with which the 1977 Review of Telescola could deal securely was 1975-76 were still provisional.

We should simply note that the best possible approximations and computations reveal that both in 1974-75 and in 1975-76 it cost slightly over 2,5 times more to educate a child in a normal preparatory school than in a Telescola reception post.

The use of Television in schools normally means an addition to costs: how is it that Telescola works out so much cheaper? In part the answer lies in the fact that most school television is an 'extra', designed to provide 'enrichment' within the normal teaching system - 'instructional' rather than 'educational' television. Other factors are important in explaining the economies here. For example, Telescola is normally housed in a primary school. Grades 1 - 4 (primary) are taught in the mornings and grades 5 and 6 (Telescola) use the same classrooms in the afternoons. Such economical double use of building is not normal in the conventional circumstance of specially constructed preparatory schools.

By far the largest single item in unit running cost is the salary bill for teaching and ancillary staff. In 1974-75, Telescola monitors were usually primary school teachers. Having taught grades 1 - 4 in the morning, they were paid extra to 'monitor' grades 5 and 6 in the afternoon. In 1975-76, such 'double-employment' began to be phased out and full-time monitors were appointed in the increasing numbers. Still, under either arrangement, monitors were routinely paid at least 1o to 15 per cent less than their counterparts in conventional preparatory schools. Yet, the key cost differential is found in the area of staffing patterns. In the Portuguese educational system, a conventional preparatory school having twelve classes of fifth and sixth grade students would be entitled to thirty staff members (specialist teachers, auxiliary and administrative personnel). However, in Telescola posts, twelve classes would rate twelve professional staff. The cost saving in Telescola posts are obvious, even though Telescola classes (on average) were smaller than conventional ones (18.8 as against 24.9 in 1974-75).

What Telescola shiefly illustrates is that a television-based system can be substantially less expensive than a direct teachi system at the secondary school level, wherever schools are organized on the basis of specialist subject teachers rather than class teachers. The saving is likely to be most marked in rural areas (where the secondary school is likely to be small) and in countries in which secondary teachers are trained in narrow and exclusive specialities, rather than qualified to teach a sufficiently wide span of subjects to allow an economical use of staff.

Student Achievement

Arrangements for an evaluation of pupils' performance in Telescola, as against those in normal schools, were not made when broadcasts began in 1965. The originators were understandably too busy with the intrigate problems of starting and then rapidly expanding a new and hazardous enterprise to be bothered with comparative evaluation. What 'evaluation' there was naturally tended to be 'formative', designed to improve the system, rathe than to provide some 'summative' comparison with another system. Further, Telescola students were not given the same tests as their urban counterparts. Thus, a "scientific" basis for comparison is clearly lacking.

Opinions on this topic are, as one might expect, rather mixed. Seventh grade teachers in conventional schools often contended that the standard of achievement among the Telescola students coming into their classes is comparatively low. Yet, the few tests which have been done at the end of the grade 7 show the Telescola-trained children doing rather better than average.

Again, theories abound. Some content that the low regard seventh grade teachers have for Telescola students stems from baises against both rural children, in general, and the Telescola educational model in particular. Concomitantly, it is asserted that the Telescola students do relatively well on seventh grade tests because they are skewed sample - i.e. only the brightest and most ambitious Telescola students even go on to the seventh grade. Doubtless, there is a measure of truth in all these arguments and rebuttals.

While we know that Telescola is cheaper, we do not yet know how much worse or better, on average, it is than direct teaching. The problems of making any convincing comparison continue to be daunting indeed. Besides which, such a comparison, whatever the result, misses the more important point that Telescola, even if somewhat 'worse', in terms of academic performance, may still be better than the real alternatives available to Portuguese rural children - such as schooling a very long bus-ride away, or boarding.

Success as a Technical and Educational Innovation

Telescola's achievement in having brought first-cycle secondary schooling into remotest rural areas, is truly remarkable. Other countries faced with a similar need would find numerous details in the system worth copying. Telescola before the Revolution had reached a high peak of administrative and technical efficiency, much of which remains, and the rest of which will doubtless be recovered in time.

There is no question that Telescola had opened up rural and remote areas of Portugal to post-primary schooling with a rapidity otherwise inconceivable, by finding a way to use primary school buildings and primary school teachers for 'first-cycle secondary' purposes. Over and above this technical and administrative feat, Telescola successfully implemented a number of specific innovations, including:

(a) Establishing a 'unified' or 'comprehensive' curriculum for grades 5 and 6;

(b) Combining traditional means of instruction and instructional television ("to arrive at teaching with television, not by television");

(c) Adopting co-education;

(d) Introducing 'modern mathematics', and more modern methods in certain other subject-disciplines, notably French, Music, Art and Crafts;

(e) Developing the role of 'assistants', with advisory functions differing from those normally associated with the Inspectorate of that period;

(f) Providing special texts for pupils (later work-sheets) geared to the broadcasts;

(g) Developing the use of other means of distribution where open broadcasting was not feasible - by landlines in San Tome, and by video-cassettes in Madeira and the Azores;

(h) Creating the role of and providing on-going support for Telescola "monitors". Though unintentional, Telescola proved to be a valuable form of in-service education for those rural primary school teachers in Portugal who also served as monitors.

5. REPORT OF THE GENERAL RAPPORTEUR

Mr. President,
Your excellencies,
Ladies and gentlemen,

General Remarks

It gives me great pleasure to deliver the report of the General Rapporteur at the end of this distinguished Seminar of crucial importance to the development of the African continent.

As we all know, the International Seminar on Distance Education was conducted by the ECA in conjunction with the West German Foundation for International Development and the Netherlands Ministry of Development Co-operation. It took place at Africa Hall, headquarters of the Economic Commission for Africa, Addis Ababa, Ethiopia, from 3 to 15 September 1979. The opening address was delivered by Mr. S.I. Edokpayi, Chief of the Public Administration, Management and Manpower Division, who spoke on behalf of Prof. Adebayo Adedeji, Executive Secretary of ECA.

It is evident that without the financial generosity of the German Foundation for International Development and the Netherlands Ministry of Development Co-operation, the initial dream of the Seminar could have never been actualized nor could it have become a reality. In view of this I would like to express the gratitude of all participants (both delegates and observers) for this generosity. Also on behalf of my colleagues and myself, may I sincerely thank the secretariat of the ECA for its efforts in planning and administering the various aspects of the Seminar, and indeed in making all of us feel at home during the proceedings of the conference. Above all, my colleagues and I feel flattered and deeply indebted to our Ethiopian participants and their people in Addis, for being such wonderful

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+Jointly sponsored and organized by the United Nations Economic Commission for Africa and the German Foundation for International Development.

hosts. We have not only made friends with them but have also appreciated their extend hospitality, particularly their invitation to visit their Adult Education and Mass Media Centres.

Specific Remarks

During the past 13 days, we have been involved in two specific activities, namely (1) plenary sessions and (2) working in the committee.

With regard to (1), in plenary session, we have been given the opportunity to exchange views and experiences on distance education in general, and in specific projects in particular. The mix of persons present has enabled us to learn at first hand of experiences in three continents - Africa, Asia and Europe - and this has been of great value to us all. This exchange was achieved through two strategies: the first was a formal presentation of a paper or talk by a particular person, and the second was the establishment of panels of persons on a national or continental basis. In both cases delegates were enabled to ask questions, and some lively discussions ensued. This exchang of views and information has, of course, not been confined to our formal proceedings, but has continued beyond the bounds of Africa Hall, where we have been able to make nwe contacts or renew old ones. This network of friendships is of inestimable value but its effects are, at this point in time, quite immeasureable, for the benefits will be reaped in the year to come.

Far too many points were made for me to be able to summarize the proceedings of these plenary sessions in a few words. However, certain common problems became apparent. Firstly, we are agreed that irrespective of the level or form (formal or non-formal) of education offered by distance education institutions, it must meet the needs of its learners and of the society within which is based. Fortunately, the methodologies of distance education, by virtue of its time-free space-free an age-free characteristics, and subject to its adaption to local circumstances, can teaching overcome problems faced by traditional forms or face-to-face education? It is time- and space-free, because it offers students a degree of independence as to the timing and location of their studies,and hence, provides a means for the enlargement of educational opportunities

to groups currently or previously unable to take advantage of traditional forms of education.
It is age-free because it can cater for students of all ages, though perhaps not the very young, and thus become a real means for realizing the aim of continuing education, without diverting persons from their productive employment. It can also be a relatively much cheaper way of providing education for the masses, given the economics of scale that may be realized.

Whatever the purposes to which we apply the methodology, we ourselves know that it works. A recurring theme has been the question of recognition of distance edcuation as a valid and effective vehicle for the transfer of knowledge and skills.
We concluded, I believe, that the burden of convincing others that we have a means to help to solve the problems of developing countries lies with us, the distance educators. Provided we ouselves maintain standards appropriate to our objectives (and we are agreed that these need to be carefully specified and related to identified needs), we will in the end succeed in convincing those who doubt - although a little bit of positive action in selling our own goods to educational planners, to political decision makers, and to educational colleagues, will also help in this respect. If we also give to our students what they hope for, we will be satisfying their expectations gain valuable allies to our side, who can influence others to see distance education for what it is - not just an effective alternative or useful adjunct to traditional forms of education (and it is that also) but a method which can help governments and development agencies to do things in the fields of formal and non-formal education which could not be done before.

If our sessions in plenary were important, our work in committee was vital. We established in the course of this Seminar, four committees: one on the establishment of a network of African distance education institutions; a second on the analysis of experiences and the identification of possible fields for co-operation; a third on staff training and development; and a fourth on the co-operative use of educational materials. The findings of these committees which inevitably overlapped, are presented below in the form of conclusions and recommendations for action, for endorsement by plenary.

The International Seminar on Distance Education accordingsly resolves:

1.1 That a directive body for the advancement of a Distance Education Programme for Africa (DEPA) be established and that it should inclose co-operation with the Economic Commission for Africa (hereafter called the ECA) promote and overseen the programme for the development of distance education in Africa.

1.2 That the effective operation of the directive body of DEPA requires the appointment of a full-time consultant, equipped with a secreterial staff, and that resources be sought to enable this to occur.

1.3 That it shall be the task of this directive body and its executive to facilitate:

1.3.1 the identification of areas of common and differing programmes;

1.3.2 examine such programmes in terms of strategies and conten

1.3.3 inform all institutions about programmes in other institutions;

1.3.4 suggest improved means of carrying out programmes,

1.3.5 examine the relevance of programmes to various societies and also advise institutions as how they can bring about improvement to their programmes, and properly plan and develop them.

1.4 That in pursuance of these objectives,

Information services

1.4.1 prepare, update and distribute a directory of distance education institutions;

1.4.2 publish a newsletter containing information on various distance education institutions, on appropriate research programmes and publications on international devel ments in the field, on seminars, workshops or conferences, and be means generally for the exchange of information among distance educators;

1.4.3 that at an appropriate time in the future, a Journal of Distance Edcuation will be established;

1.4.4 to establish a clearing house which will:

- facilitate the collection of information on distance education from various sources;
- compile a bibliography on distance education;

- provide a photocopying and microfilm service;
- edit material for distribution.

Such a clearing house should be manned by a consultant, working in close collaboration with ECA and other appropriate sources of information (e.g. UNESCO, IBE).

1.4.5 That African and other institutions should send details of courses and audio-visual and other materials, including research and evaluation reports and so on, to the clearing house referred to 1.4.4 above;

1.4.6 Catalogue and circulate to institutions information on the academic materials available, so that interested institutions can make their own arrangements for exchange (see 1.4.14 below);

Advisory Services

1.4.7 Encourage and advise bodies on how new distance education institutions can best be established;

1.4.8 to ensure an Information Handbook on Distance Education, will be produced for the purpose of informing and advising governments and other agencies;

1.4.9 that a film with adequate supporting literature should be produced to promote distance education showing what it has been able to achieve in a number of countries;

1.4.1o identify appropriate institutional manpower needs, and advise on and sponsor training (see under training below);

Curriculum and Course Materials

1.4.11 Advise institutions on how to maintain appropriate academic standards;

1.4.12 Examine and advise on the possibilities of common lecture materials, radio programmes, syllabi etc.;

1.4.13 Promote the organization of joint course writing workshops for the design and elaboration of course materials;

1.4.14 Promote the exchange of instructional materials and model courses at nominal fees to cover postage and printing costs. Institutions should be prepared to exchange materials at nominal cost with the possibility of sharing copyrights;

Equipment

1.4.15 Conduct a survey of equipment in use in African institutions with a view to determining which makes of equipment, e.g. printing machinery, audio-visual production equipment are cheapest and have stood up well in African conditions. Such a survey could useful include information on utilization and output of such equipment as well as maintenance problems it has encountered;

Staffing

1.4.16 That distance learning institutions should exchange in formation on job descriptions, staff recruitment procedures and conditions of service;

1.4.17 that guidelines as to the types of workers which are, or will be required in the field of distance education, be drawn up and made available to institutions, and that recommendations on appropriate job titles for trained personnel be issued;

Training

1.4.18 That an appropriate body should act as a centre for matte concerning staff training and development, and inter ali

1.4.19 map out areas of expertise necessary for distance educators;

1.4.2o identify appropriate froms of training and the broad contents of training programmes;

1.4.21 identify the location of experts and persuade them to organize appropriate training;

1.4.22 organize workshops, visits and attachments for distance educators and administrative and technical staff on various subjects at appropriate levels;

1.4.23 promote the exchange and secondment of staff;

1.4.24 to develop a course for correspondence writers on the basis of detailed proposals made by one of the Seminar committees;

1.4.25 that consultancy and advisory services in course programme and instructional material development as well as in other aspects of distant education should be provided from a pool of experts preferably recruited from among Third World countries but also from institutions outside where the methods used are recognizeably of a standard from which benefit can be gained;

1.4.26 that ECA be informed of the very great and urgent need for having a co-ordinator responsible for organizing the training programmes at the request of AACE and/or individual institutions or organizations acting alone or in consort, and that funds be sought to enable this to be done;

Facilitator of Contacts

1.4.27 that an appropriate body acts as a centre of contact among African distance education institutions, their educational and administrative staff, and related experts working in the field;

1.4.28 that an appropriate body acts as a medium for contacts between African distance education institutions and non-African bodies working in the field, and between African distance education institutions and funding bodies such as CIDA, DANIDA, DSE, DVV, Ford Foundation, NORAD, SIDA, USAID etc.

AACE Direction

1.4.29 that a full-time consultant be appointed to work under the direction of an appropriate executive body (amended as required); and that a report on progress be made annually to the Executive, which shall review progress and issue recommendations.

Funding

1.4.30 African Governments, ECA, World Bank and other agencies should be requested to fund the development of distance education in Africa;

1.4.31 African institutions will meet once every two years to receive progress reports and to elect a new Executive. A part of the programme activity will be to publish a professional journal regularly. It could also undertake production of the handbook;

1.4.32 ECA should be asked to obtain funding from donors to execute the programme(s);

1.4.33 As far as possible, African expertise in distance education will be utilized to carry out the assignments, consultancies etc.

Services of the ECA Consultant

1.4.34 that to ensure implementation of the above recommendations advanced by the Seminar, ECA be asked that, until such time as full-time consultant has been identified, recruited and inducted, the current ECA consultant be retained; and that if this should prove to be impossible, then means to be found whereby he could be consulted on appropriate matters. This recommendation is of the utmost importance if continuity of work is to be achieved.

Follow-up Conference

1.4.35 Promote and secure funding to enable a follow-up conference of a similar nature to the present one to be organized for the purpose inter alia of reviewing progress on the recommendations made above.

6. RESOLUTIONS OF THE SEMINAR

Resolution I

This Seminar places on record its deep appreciation and thanks to Prof. Adebayo Adedeji, Executive Secretary of the ECA for his inspiring and thought-provoking address read out at the opening session and to Mr. S.I. Edokpayi for guiding the deliberations. The Seminar also expresses its great appreciation for the untiring efforts and work put in by Dr. Hakemulder and Mrs. Hakemulder who looked after the participants with utmost courtesy and care.

Resolution II

The Seminar places on record its deep appreciation and thanks to the German Foundation for International Development for providing generous funds for the Seminar, and in particular Dr. J. Heising who took keen interest in the deliberations of the Seminar and showed utmost consideration in tackling problems. The Seminar also appreciates the commendable work done by Mrs. Klarmann looking after the financing of participants and in making various arrangements.

Resolution III

The Seminar places on record its appreciation and thanks to Dr. M.M. Kaunda, Chairman of the Seminar, for conducting the plenary sessions in a very dignified and lively manner, and sharing responsibilities with the Vice-chairman.

Resolution IV

The Seminar expresses its appreciation, gratitude and thanks to Mr. G.W.S.V. Rumble for performing the stupendous task of General Rapporteur so admirably.

Resolution V

The Seminar expresses ist appreciation and thanks to chairmen of the Discussion Groups and their rapporteurs for the commendable work done by them.

Resolution VI

The Seminar expresses its appreciation and thanks to the ECA secretarial staff and to Mr. Grey-Johnson, and the interpreters for the good work done by them.

Resolution VII

The Seminar places on record its gratitude and thanks to the ECA, the Embassy of the Federal Republic of Germany, the British Council and the Dutch Government for their generous hospitality and assistance in making the Seminar a success.

Resolution VIII

The Seminar places on record its gratitude and thanks to Prof. Bakhshish Singh, President of the International Council for Correspondence Education and Mr. T. Dodds of the International Extension College, Cambridge, for their participation and valuable contributions to the deliberations of the Seminar.

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7. CLOSING SPEECHES

7.1. Address by Dr. J. Heising, Representative of the German Foundation for International Development

Dr. Heising wanted to make some observations at the end of the seminar. In general he would like to state that the International Seminar had been a great success. The seminar has had a long history. The plan for this seminary came up during the Non-Formal Education Symposium in 1978. Since that time there had been an exchange of ideas and plans between ECA and DSE. It always takes time to come to a basic concept. Dr. Heising was grateful because the expectations were fulfilled.

DSE regards it as a main purpose to be a platform to exchange ideas between institutions, experts etc. in respect for development in their countries. ECA made this possible. He mentioned in this context the enormous work done by Mrs. and Dr. Hakemulder to make the International Seminar a success. DSE never acts alone but always works in close collaboration with existing institutions and therefore DSE co-operates in the organization of several seminars.

As a next point Dr. Heising stated that the expectations were fulfilled because knowledge was exchanged. He expressed special thanks to the Asian participants, who came the long way to Addis Ababa. He also appreciated very much the presence of the representatives from Open Universities in Europe, especially of the consultants Professor Holmberg and Mr. Rumble. They had brought a lot of knowledge and information to the conference.

A third point in the opinion of Dr. Heising had been the action oriented planning. Having seminars does sometimes not mean more than just an exchange of words. This seminar, however, thanks to the enormous input of ECA in general and Mr. Edokpayi and his team in particular had shown that there is action oriented planning.

On behalf of the Director of the DSE he hoped that some of the plans developed during the Addis Ababa Seminar can be realised in the next future in the field of Distance Education.

7.2. Address by Professor Singh, Deputy Chairman of the International Seminar for Distance Education

Prof. Singh expressed that in his opinion the seminar had been very successful. His observation was that the African countries have common problems with most of the Asian countries. Some of these problems are the high rate of illiteracy, the problem of reaching and activating the masses, the necessity for adult education and in relation with this providing higher education facilities to new literates.

In a free and democratic country the right education should not be denied. But in the most of the developing nations the resources were limited and therefore Distance Education was the answer. This educational strategy equalizes educational opportunities. Distance educators are serving two objectives:

In the first place providing higher education to those who cannot afford other means.

In the second place non-formal education - including vocational and technical training - can be provided through distance education methods

As a top priority Prof. Singh mentioned the identification of educational needs. The Distance Education Institutions should provide courses in accordance with these surveys.

Prof. Singh stated that this seminar had been a very useful exercise. Implementation of the recommendations would certainly result in a lot of benefit for the African people.

All the participants would carry happy memoirs back home. The conference had been very good for exchange of information and experience.

7.3. Closing Address by Dr. Hakemulder, UN Regional Consultant for Distance Education, ECA

"Honourable guests,
Dear Colleagues"!

"At the end of the International Seminar on Distance Education 1979, I would like to speak a few words. Donors and participants have been mentioned many times and the only thing I can do is to join the other speakers in thanking them. But especially I would like to mention all those people who have been working behind the screens: in the first place the interpreters, our famous Geneva team. And next to them the secretaries from the division, the Conference Unit, the travel unit, the technicians, the typing pool, the translation section, the drivers, the documents and reproduction section and many others more. They have even been working on official Ethiopian holidays and in this way they have their share of the success of this seminar.

It is common in Europe to mention the support of your wife, it is a fashion and in many cases not more than a slogan. But I am sure that you agree that my wife's contributions to this seminar have been enormous. Without her support there would have been no seminar and therefore I only say: Thanks.
Also a lot of support I have got from the Chief of the responsible division, Mr. Edokpayi. His experience on international meeting is enormous and I have learned many things from that. His flexibel approach has given me the freedom I need to encounter and overcome the many many difficulties we have been facing daily for the past 3 to 4 month.

And now, overlooking the results of this seminar, some reflections from my side. Am I completely satisfied with the results? That would be impossible. As a psychologist I know, that if one has been working for months to a certain point, to a high light, then as soon as that point is reached, there is some disappointment. Expectations may have been too high. Reflecting on the written results which we have before us, I have been asking myself the question: what will be real effect of our recommendations, how many will be implemented and how many will be shelved for another one or two decades? But on the other hand if only a few of the recommendations will be implemented, if only one or two countries find because of this conference alternative ways to solve their problems then we can say: the seminar has been a success!

Reading newspapers, listening to a radio, world news I am often thinking, that we live in a mad world. Division in religious groups, politics, sexes, races and tribes, the haves and the have-nots and what have you. It seems to me that in most cases the gaps are even growing and widening. Therefore this gathering has been so wonderful because so many gaps have been bridged in a harmonious way in our group with so many people coming from all parts of the world. May be they are the educators in general and especially the distance educators who are not only able to bridge gaps but also will be the forces for the development of their countries. In the context of development most planners agree on several conclusions:

1. Development needs a change of attitude of the people. In my opinion it is silly to reject the products of advanced technology just because they come from overseas countries. There is need for change, but a change based on the roots of the cutural and philisophical heritage of the people. Study of other cultures and nations gives the opportunity to respect other people's way of life and deepens and stregthens on the other hand the advantages of your own. In this respect a distance education institute has a task and can act as an agent of change.

2. In this policy of change it is of utmost impotance that leaders of nations, communities, religious groups etc.

set new goals for their people in a democratic way and again distance education systems can play a role in reaching the goals.

3. In this context a free press is an important tool for the leaders to explain the new goals and on other hand for the people to express either their agreement or disagreement with their respective leaders and so to ensure democratic decisions. I would like to see that this freedom also is expanded to distance courses. On top of that it will be an advantage for distance institutions to have a good relation with the mass media, so that the institutions can make use of newspapers, radio and TV to communicate with the masses in the rural areas. This is very important because with the use of the mass communication technology we will be able to

4. mobilize the masses in order to develop their country and community, to develop their own individual potentials with the aim to secure a better life for themselves, their families and for everybody for whom they are responsible. In this connection it seems to me of utmost importance that distance courses reach everybody, that means also

5. girls and women. If we analyze the highly developed societies in antiquity then we have to come to the conclusion that these societies did not neglect the education of women. The role of women in the family, in society and in jobs is an important one and our distance education systems have a role to play in this respect.

6. However, the most important aspect in the light of development is the motivation of the people, the need for achievement, the inner power to work and reach goals set by themselves or by the leaders they have freely accepted, to be responsible and reliable and to be aware of the situation they are in. Education means to teach people to reach - without bothering others and without being dependent on other people - the highest possible inner satisfaction. How distance education can play

a role in this respect would take another seminar.

Coming back to the feasibility of many of the recommendations I will very briefly touch the problem of funding. A very crucial problem. In a recent meeting with one of the representatives in Africa for the European Economic Commission, the EEC, it has become very clear to me that the EEC is waiting for good project documents. Funds will be certainly available for sound distance education projects. My advice to the AACE and individual institutions in Africa and Asia is to prepare your project documents and send them - through ECA, Mr. Edokpayi - to the EEC in Brussels with a copy to me. I am asked to act as a mediator between ECA and EEC to plead for funding of your projects. I will not only try to get financial resources from the EEC but also from donor organizations in Western Europe. Sound projects, I am sure, will get the necessary funding.

With this positive assurance I suppose we have come now to the end of the International Seminar on Distance Education 1979, African Hall, Addis Ababa.
I thank you all for your co-operation and contributions. To all of you, no .... I do not want to say fare well, but " we will meet again" or for our German friends "Auf Wiedersehen".

With these words I declare - on behalf of the United Nations Economic Commission for Africa - the International Seminar on Distance Education 1979 officially closed.

8. FUTURE ASPECTS AND POSSIBILITIES - Dr. J.R. Hakemulder

8.1. Evaluation of the Seminar

After the undoubtful great success of the International Seminar it is worthwhile to look at the future in relation with the recommendations of this seminar. In my opinion a short critical analysis will be useful, especially because of the many papers, discussions and data of this seminar. I would like to limit this analysis, however, to a few main points.

In the strategy for the Seminar we can distinguish three main aspects:

(i) Plenary session with a presentation by one of the consultants or participants with discussions following;

(ii) Panel session where a group of experts discussed a particular situation or problem with participation in the discussion of the other experts.

(iii) Committee discussions where 4 groups of participants gave their opinion on re-planned topics.

I am convinced that this conference strategy has been part of the success of the deliberations. During this relatively long seminar - nearly two weeks - it has provided the participants with the necessary diversity. This enabled all the experts and consultants to participate and contribute at the highest possible level up till the end of the meeting. Further has this strategy given the opportunity to learn about many new developments in distance education, to exchange ideas and plans, and to develop action-oriented programmes. In general terms I have the impression that a very strong point has been the platform function, namely the exchange of experiences, in which all participants have participated. The same is true for the teaching function of the seminar: the participants have got a lot of information, not only by the plenary sessions, but also through the many papers and documents provided by ECA. This will certainly assist the experts from institutions in Asia and Africa in their work, and also give them the power to continue with the very important and difficult work they are doing and to overcome the resistance against education they are still facing. But I am afraid that this new courage will be of a temporary nature if it will not be supported by actual and practical programmes. In my opinion the weak point in the seminar has been the production of action-oriented programmes. The need for these programmes has been the background for the formation of the committees, which took a considerable part of the conference time. Maybe that the time was still too short and the committees too large - around 2o persons - to expect the production of project documents. In this respect it seems relevant to analyse particularly the general outcome of the committee work.

Committee I: Exchange of Experiences and International Co-operation

In my opinion the exchange of experiences has had a hundred percent coverage. This does not only apply for this group of participants, but it applies to all the experts.

Many suggestions and ideas have been produced in connection with international co-operation, but this has not resulted in the establishment of clear-cut lines of communication. However, it may be satisfactory that many informal contacts have been established. But still I have the impression that communication on a more regular basis has to be started.

Problems which have nearly not been touched are: establishment of linkages for technical co-operation, exchange of personnel, preparations of outlines for audio-tapes to be broadcast in Africa and Asia in the context of promotion of distance education, short-term and long-term programmes for co-operation, the use of private consultancy firms in the establishment of institutions and advisory services for further development.

Committee II: Staff Training and Development

Following the results of an ECA research, based on questionnaires and surveys, the training of personnel is the most urgent problem in the development of distance education in Africa. Therefore the African Programme for Distance Education developed by ECA contains a strategy for training with two components:

a) training through seminars/workshops;
b) training through distance education methods.

The committee has provided some suggestions for workshops, and some more specific directions are given by AACE.
The draft Correspondence Çourse for Correspondence Course Writers provided by the Secretariate has been discussed thoroughly and suggestions are given to improve the course. With these data the course can be made ready for publication in a short time. However, the committee has not given a plan for action as how to use the course.

Nearly no attention has been given to the following problems: suggestions for other correspondence courses to be developed in a central place, involvement of African/Asian universities in the training of distance educators, the development of a strategy for training courses based on a Handbook for Distance Educators, establishment of a private non-profit making organization for the training of personnel for African/Asian distance education institutions.

Committee III: The Role of the University in Distance Education and the African Network of Open Universities

The first part of the assignment has been covered satisfactory. The Secretariate's Draft Discussion Paper on the Establishment of the African Network of Open Universities has been critizised by the committee, howwever without providing clear alternatives.

Sub Committee IV: On Exchange of Distance Education Materials

This committee has given some very pratical und useful suggestions.

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8.2. Conclusion

In my opinion the Seminar, however successful it may have been in many respects, has now provided for direct feasible and practical projects.

Most of the recommendations are heavily dependent on financial assistance from overseas donor countries and -organizations. As long as these funds are not available, it will be impossible to implement the recommendations. And the availability of funds will depend on the presentation of sound project documents.

To break the vicious circle I believe that now the time has come - especially with all the information and suggestions gathered from this seminar - that one or two central agencies are going to assist in the implementation of some of the most important and pressing recommendations in the establishment of new institutes and expanding the services of existing institutions. Therefore there is need to list the priorities of assistance to distance education institutions. In this relation project documents have to be prepared and presented to donor organizations for financial as well as expert assistance.

8.3. The Actual Situation of Assistance

The actual situation in relation with assistance to distance education institutions is at the moment very encouraging. ECA - recognizing the importance of the distance education methodology - has been acting as a central agency. Therefore the Secretariate has developed a complete Distance Education Programme for Africa. Unfortunately, however, the current Dutch Regional Consultant, who has been attached as a bilateral expert to ECA for three years, has by now returned to his home country. The reason is that United Nations rules do not allow bilateral experts to work in UN organizations for longer than three years. But in the mean time United Nations has not been able to create a post for a distance education advisor to implement the programme mentioned before.

On top of that the Section Manpower in the Public Administration, Management and Manpower Division of the ECA is already understaffed. Net result is that therefore ECA - for the time being - will be unable to continue its role as a central agency in this respect and to give the necessary assistance to African member States.

The above mentioned problems are not meant as an attack at the role of ECA in this context. In contrary; ECA has foreseen the problem we are facing now and has done its utmost to do something about it. Project documents have been prepared to assist the Distance Education Unit and have been presented to several donor organizations, however without positive result. After that ECA has requested the Government of The Netherlands to continue with the support of African Distance Education Programme. As a first priority ECA has asked assistance to enable Dutch consultant to continue his work from his home country for the period that ECA has no post available for an African Distance Educator. At first side it may seem a strange proposal that a consultant would work for Africa from The Netherlands. However, flight connections between Amsterdam and the African countries are relatively good in comparison with the connections from Addis Ababa. Also postal services from The Netherlands are better. Therefore the services will certainly be not less effective and efficient.

The Dutch Government certainly has shown a great interest in the Development of Distance Education in Africa. The Government therefore takes the ECA proposals very serious and the Ministry of Foreign Affairs and the Ministry of Development Co-operation are studying the possibilities at the moment that the report is written.

AACE has also stressed the importance of a full-time consultant in their recommendations. AACE members are all distance educators, who are fully occupated in their respective institutions. We cannot expect them to do much work in relation with the African Distance Education Programme for the simple reason: lack of time. Therefore the necessity for an AACE full-time consultant is acknowledged.

The idea of a consultancy firm may be realized in next future. Special emphasis should be given to educational and training problems in developing countries. Distance education should become the heart of the tasks. Distance Education is not only very highly cost-effective, it also gives opportunities in reaching the masses and will contribute to democratisation of educational systems.

- Finish -